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CHARLES W. DULLES, M.D.

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COMMUNICATIONS.

AN EPIDEMIC OF MALIGNANT TYPHOID FEVER AT LOSANTVILLE, IND.

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On June 30, 1887, the first recognized case of typhoid that had occurred in our practice for a long series of months presented itself. After this until January 1, 1888, our village and the surrounding country were almost depopulated by it. I say the first recognized case, for I am persuaded that some months before there was a case of typhoid in the village, which was masked by complications and ran its course to convalescence without being diagnosticated. Of course no attempt was made toward disinfecting the stools, which were thrown into the abominable privy-vault with which our village was cursed. No well in the town is more than fifty feet from one or more of these vaults, and some of them are within fifteen or twenty feet. The micrococci from this unrecognized case multiplied and flourished in this vault, and a few strayed away to the neighboring well. There they lived till after a very protracted drought, in which the water in the wells became so low that we had to drink all the impurities of the water in a concentrated form—bacteria and all. It was simply the essence of nastiness boiled down. Then it was that our epidemic began. Had we been able to control our patients, we might have stopped it soon. But the people there are like many people elsewhere: they believe disease is a sort of providential something, they don't know what, and don't care what, and that it cannot be prevented. Hence our efforts at complete disinfection were only partly successful. One uncontrollable patient insisted that, as long as he was able to turn out and walk, he would not have anyone carrying the chamber after him. He would boldly walk out, attend to the calls of nature, and return to bed. Fortunately such cases were few. As people became more in earnest and more careful, and as deeper wells were sunk, and the rains came to dilute the nastiness so that in a given amount of the water we did not get as much of the filth—and probably what was best of all, as many began to use rain-water or boiled water—then the epidemic began to subside. The writer of this paper was the last patient, and he took to his bed on New Year's day.

Losantville was then only a small village of one hundred and sixty inhabitants; but out of these hundred and sixty there were thirty stricken down, of whom four died. All told, the writer saw fifty-six cases, having full control of thirty-seven of this number, while the other nineteen were either seen in consultation or treated by other physicians. Out of the 56 there were 12 deaths—a high rate of mortality, 21.4 per cent. Seven cases were seen but once or twice, and five of these died. So it is but fair to count the mortality as 7 in 49, or 14.2 per cent. The case running the shortest course lasted fifteen days. The patient was a woman, and she seemed to be completely overwhelmed from the very beginning with a large dose of the poison, and steadily and rapidly sank, dying of heart-failure, but without complications. Her pulse gradually increased from 108 to 150. Her temperature ranged from 101° to 104°.

The longest continued case ran twenty weeks from the beginning of the fever till he became sufficiently convalescent to stand alone. This case began as an intermittent, then became remittent in type, and finally continuous. At no time did his fever run high, but it continued uninterruptedly for the whole five months. During the last six or eight weeks of his illness he had involuntary alvine evacuations, and his delirium continued for several weeks after he was up and around. Complications were present in fifteen of the cases. One patient had an abscess in both middle ears, a large bed-sore, and involuntary evacuations from the bowels for eight weeks, but finally recovered. Five had intestinal hemorrhage. Three of these patients died. One patient, after his disease had run a smooth course, and after he was convalescent for a week, was attacked with severe colic and gastro-enteritis, which kept up irregularly for six weeks. One became markedly jaundiced; one had broncho-pneumonia; two had phlebitis, in one of which both limbs suppurated; three had bed-sores—in one which resulted fatally the bed-sore was the largest and most intractable I ever saw. As I was disappointed in nurses one night, a son was left, who was himself just recovering from a severe attack, to watch with his mother. A frequent and distressing desire to urinate seized the mother. The son, not being able to place the bed-pan so often, padded it as best he could, and left it in place for several hours. The result was breaking down of all that part which was pressed upon. A slough came away, leaving a hole four inches in diameter, extending down to the sacrum and coccyx, exposing all their processes and ligaments. The origin of the glutei muscles and their coarse fibres were as plain as ever I saw in the dissecting-room. After this, one sore appeared after another, till at least twenty were on her back. Cold abscesses began to form, and death closed the scene. To illustrate how slight pressure on her would cause a sore, it may be mentioned that she was inclined to lie with one hand to her face so that the tips of her fingers touched her cheek. A bed-sore formed here, and was followed by sloughing down to the buccinator muscle.

Two patients had endocarditis, and one of them died; one developed a melancholic condition, in which hysterical lock-jaw, etc., played a prominent part. Four had involuntary discharges; and two of these patients died. The eruption occurred about the tenth day, and in a few cases was so profuse as to resemble measles at a superficial glance. Two patients had relapses which occurred after an absence of fever for ten days. I generally found them free from fever in the morning for a few days about the end of the third week.

In closely watching these cases with a deep interest in the disease, I became convinced of the following practical points:

1. The early diagnosis of typhoid fever is impossible. 2. Different epidemics differ greatly in severity. 3. One attack affords but slight protection against another. 4. Epistaxis and diarrhœa, as early symptoms, are exceptions. 5. In a great majority of cases, the disease is ushered in by a chill. 6. The mortality is greatest among people in good financial condition. 7. Height of temperature is an uncertain guide as to the final termination. 8. Hemorrhage does not occur oftenest when the fever runs high. 9. The disease is strictly self-limited. 10. Digitalis is utterly useless in controlling the heart. 11. Strict antisepsis will prevent a spread of the disease—it is not contagious.

To dilate a little further on the summary of my observations, I would say, to prove that the early diagnosis of typhoid is impossible, I have but to appeal to every practitioner of many years' standing. He will tell me that often what he unhesitatingly pronounced typhoid ended in three or four days, and what he insisted was nothing but malaria proved to be typhoid in all its dreadfulness. I was called to see a girl ten years old, who had complained for two weeks, with a gradually increasing fever for six days. I found her with pulse 124, temperature 105°, bowels tympanitic and very tender; repeated epistaxis, a severe frontal headache, a peculiar muddy appearance of the skin. This happening in the midst of the epidemic, I pronounced the disease typhoid at the first visit—a thing I very seldom do. The child was in school in less than a week. Such cases as this were of frequent occurrence.

Before this epidemic, we had, in six years treated forty-four cases, all told, with two deaths—a mortality of four and a half per cent. In this epidemic it was 14 per cent. Quite a number who had undoubted typhoid say they had had it before. Of course we must take into account the possibility of a mistaken diagnosis. Several years ago I became convinced that epistaxis was not the rule, and have wondered why authors and lecturers so persistently set this down as a symptom. In all the cases during the epidemic, but one gave me a history of nose-

bleed at the first visit, and in but one or two did it occur after the first visit.

I think I may safely say that 85 per cent. of the cases were ushered in by a chill. Some had a single chill, others two, and others as many as five occurring at regular intervals. True, we were in a malarious country, and it is probable that latent malaria develops itself when the system becomes reduced by the incipient typhoid, thus masking the latter. Hence our misnomer — typho-malarial. I have seen the disease in all grades of society, but never saw but one death among the lowly. I have seen them recover amid squalor, filth, and negligence, and they die oftenest when surrounded with luxury and all that we as physicians can ask in the way of nursing. Hence I say the mortality is greatest among people who are in good financial condition. One physician suggested an explanation of this fact by saying that probably in our anxiety to save the good-paying patient we do too much. His inference was that the more severely we leave these cases alone the better they get along. I cannot plead guilty to discriminating between the classes, neither am I guilty of over-dosage.

As to prognosis, I regard the height of the temperature as of very uncertain value, while the rapidity of the pulse is the best guide we have. A pulse continuing over 100 for many days is a bad omen, and calls for something—not digitalis—to control it. I thus speak of digitalis from my personal experience. I have given it time and time again, and I find that I get *no* results till the effects come in such overwhelming quantity that I wish I had given nature still another chance. For instance, a young woman was having a pulse day after day of 108. I began giving tincture of digitalis, increasing it each day, for the pulse gradually went up, till she took two drachms each day. Finally, one evening her pulse was 120. I again increased the digitalis. Next morning it was 75 and slightly irregular. That evening it was 47 and very irregular. I stopped the drug when the pulse went to 75, but it went on down to 42, and became so irregular both in time and force that the normal heart-sounds were indistinguishable. It continued thus for two weeks, and then went up to 108. Patient recovered. This did not occur in one patient alone, but the experience was repeated each time I pushed the digitalis.

Before this epidemic, I had treated several cases that were complicated with intestinal hemorrhage, and all recovered. I began to think with Flint that if it had any influence in the prognosis it made it more favorable. But in this epidemic the first three cases of hemorrhage died. Then I began to think that hemorrhage increased the danger about one hundred times. The fatal cases of hemorrhage occurred in cases that had previously been noted for a low temperature—not for a high temperature, as is stated by most authors.

The popular belief that it is a contagious disease still survives in the prejudices of those who do not make it a study. The people of our village will tolerate any number of cases of intermittent or remittent, or pneumonia, or rheumatism, in the same family at the same time, without believing them contagious. But let even two cases of typhoid occur in the same family, and they are for ever afterward cited as evidence of the contagiousness of the disease. I had abundant evidence during this epidemic to fully convince me of the non-contagiousness and the mere infectiousness of the disease. In those families in which disinfection was least observed, the greatest number of cases occurred, while in those families in which we had full control of the disinfecting, or rather our orders for disinfecting were fully carried out, but one case occurred.

We had no stereotyped course of treatment, but met each case as it presented itself. I think we got good results in controlling the diarrhœa with naphthaline. Antifebrine in most cases added to the comfort of the patient if given when the temperature was high, but if pushed it invariably caused depression, cold extremities, with general shivering.

REPORT OF A CASE OF FECAL ACCUMULATION AND CONSEQUENT OBSTRUCTION FOLLOWING LAPAROTOMY.

BY CHARLES B. PENROSE, PH.D., M.D.,
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The following case is reported because it serves to illustrate the danger of permitting the bowels to become constipated immediately after an intra-peritoneal operation. F. L., aged 35. A small, weak, anæmic woman, with lateral spinal curvature and deformed pelvis. Had one child three years ago at seven months, premature labor having been induced by Dr. Bernardy, on account of the pelvic deformity.

She was operated upon by the writer at the Gynecean Hospital, February 18, 1888,

for the removal of a small ovarian cyst on the right side.

The operation was simple, and the convalescence very easy. The bowels were moved by enema on the third day, and after that regularly every one or two days, until the fifteenth day after operation, when she was allowed to get out of bed, and ceased to be under strict medical supervision. She then became constipated, and neglected to call the attention of the nurse or medical attendant to the condition of her bowels until eight days had passed without her having an evacuation.

She then presented the following symptoms: Tongue pasty, white on edges, black in centre; pulse 120; temperature 101°. There was continual nausea and occasional vomiting. She suffered from attacks of tenesmus following the discharge, by rectum, of small quantities of blood-streaked mucus. No feces were passed. There was very slight abdominal distension and tympany, and no general abdominal pain. Lying immediately under the parietes and to the right of the scar of the abdominal incision was a very tender movable mass, about the size of a child's head. The consistency of the mass could not be determined by palpation on account of the great tenderness.

The diagnosis of fecal impaction, probably in a mass of adherent intestines, was made, and she was treated with frequently repeated small doses of calomel and large rectal injections of warm water administered in the knee-chest position. During the first two days of this treatment, many small hard lumps of feces were discharged, and the abdominal tumor became less tender and diminished in size. The discharge of mucus, and the tenesmus also diminished. On the third day, the bowels began to move of themselves, there being six or eight large naturally formed movements daily for three or four days. The abdominal tumor rapidly decreased in size, and had disappeared by the eighth day after it had first been observed.

The further convalescence was uneventful.

The tendency to constipation, accumulation of feces, and consequent intestinal obstruction, which follows laparotomy, and which was so marked in the case just recorded, is in most instances due to slight peritoneal adhesions which occur between loops of intestine. These adhesions, by matting together segments of bowel, not only interfere with proper peristaltic motion, but also favor the production of sharp flexures or kinks, which seriously impede the flow of the intestinal contents.

In most cases of abdominal section, few, if any, intestinal adhesions occur. The most frequent position of these adhesions is along the line of incision, or to the pedicle of a tumor. Adhesions to the incision are, to a great extent, excluded if the omentum is swept well down before closing the abdominal wound; and, if the bowels are kept freely moved from the second or third day after operation, any adhesions which have formed, either to the abdominal wound or between loops of intestine, will probably be broken up.

In other cases of abdominal section, however, where there has been much exposure or irritation of the peritoneum, some local, if not general, adhesive peritonitis is very common, and the consequent matting together of loops of intestine is the cause of subsequent trouble. The practice of free abdominal irrigation before closing the incision in such cases does much toward preventing these adhesions. But, after this irrigation, the usual procedure of sponging dry the peritoneum is to be avoided.

Such sponging is not only unnecessary, but it is often deleterious; the irritated peritoneal surfaces being more likely to adhere when dry and in close contact, than when surrounded by an unirritating fluid. For this reason, it is best in such cases to make no final sponging, but to leave a quantity of clean water in the abdomen when the incision is closed. The quantity of water which can be thus left depends altogether upon the rigidity of the parietes and the condition of the intestines as regards distension.

In all cases, the early administration of purgatives, and their continued use, if necessary after the patient is out of bed, will tend to prevent and to overcome this form of intestinal obstruction, which is not an uncommon sequel of laparotomy.

CASE OF FECAL ABSCESS.

BY A. NOEL SMITH, M.D.,
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There is perhaps no region of the body in which diagnosis is more difficult than it is in certain parts covered by the abdominal parietes. In the inguinal region, for example, how many surgeons have made false steps, where so much depends upon an early and correct diagnosis, in order that suitable treatment may be inaugurated. We some-

times see a case presenting quite an enlargement in the neighborhood of Poupart's ligament. To listen to some surgeons and surgical writers, we might be led to believe it easy to distinguish between femoral and inguinal hernias; but in *practice*, a mistake is quite often made. So, then, if we diagnosticate hernia, we have yet to say whether it is femoral or inguinal. But then we also get here "enlarged and inflamed glands, which may be attended with symptoms of disturbance of the alimentary canal, so as to simulate hernial conditions."

Again, there may be a deeply seated abscess pointing in this region. Thus it is we often meet with obscure cases in practice which give us much anxiety, until lapse of time and absence of peculiar symptoms exclude the graver conditions of hernias, etc.

Abscesses forming in the *right* iliac region, as the result of a foreign body in the appendix vermiformis, are not very rare. We have all seen cases recorded, if we have not met them in our professional life, of patients who presented symptoms of hernia, and who finally had abscesses form in the right iliac region, from which cherry-stones or other foreign bodies were discharged.

But it is seldom the case that we find foreign bodies lodged in any other part of the large bowel, which at length lead to perforation, and the formation of abscesses. One author states: "There are three conditions under which a foreign body which has passed through the length of the alimentary canal may become retained in the colon, sigmoid flexure, or rectum. These are (1) when solid fecal matter is deposited around the foreign body; (2) when owing to its shape the foreign body sticks into the wall of the gut, or becomes fixed across its lumen; and (3) when any constriction of the bowel exists."

Whenever fecal abscess occurs, one of two things is true: either the fecal matter has passed through an opening in the bowel, and by its irritating presence set up the surrounding inflammatory action, or the abscess was originally formed outside the gut, and has ulcerated through into the intestine. Thus the fecal element in the case is somewhat of the nature of an accident, just as, to quote another, "the opening of an abscess into an artery, vein, or joint is an accidental complication."

The causes of fecal abscess will readily suggest themselves. Cancer is considered the most common of all causes, and, after this, on the right side, diseases of the vermiform appendix. Ulcers of the bowel may prove a cause, whether simple or tubercular in their nature. Gall-stones may sometimes ulcerate through; and then, as already intimated, foreign bodies may by their confined presence press through the walls, and a circumscribed inflammation with abscess result.

I will at this point note a case occurring in my practice in the early autumn of 1887. My patient was an unmarried woman about sixty years old. Her previous history was excellent. I was called to see her September 19, 1887. She had noticed for two days an enlargement and tenderness in the left inguinal region. I found upon examination the swelling, as described, quite large, hard throughout its extent, and not movable. The patient's bowels were constipated.

I could not arrive at a diagnosis, but deemed it one of three things: inguinal hernia, femoral hernia, or abscess. My opinion inclined to the latter. I gave calcium sulphide, gr. 1-10, every hour, and used locally an ointment composed of fluid extract of belladonna and agnine.

September 20. — Patient no better. Slight movement of bowels from enemata. Same treatment continued. I did not think it a case of hernia, because there was no nausea, vomiting, pain about the navel, nor any other symptom of hernia.

September 21.—Patient had three spontaneous movements of bowels, relieving anxiety as regarded strangulated hernia. As there was with me now no doubt of abscess, I began to poultice, giving quinine in tonic doses, and morphia with atropia, to relieve pain and secure rest. Also ordered milk diet. There was no particular change for some days, the parts growing gradually redder and more discolored. On September 28, there was quite marked bulging, but the swelling was tense. The next day, the tumor was softer in places; but I could not detect fluctuation. On September 30, it was more tense, if anything, and the bulging was more marked.

On October 1, I made an incision through the skin in the centre of the tumor, just above Poupart's ligament, after injecting cocaine. I inserted dressing-forceps in the wound, and separated the blades, after Hilton's method. Upon doing so, to my surprise, quite a quantity of fetid gas escaped with force sufficient to spray the blood from the opening, and with quite a sharp report, which startled the patient.

The tumor, which had extended upward to the crest of the ilium, was now a trifle less tense, and I got crepitation.

At my evening visit, I again dilated the opening with the forceps, and a dark, feculent, very offensive discharge followed. I continued poulticing through the next day, when I enlarged the opening and irrigated the cavity well with a wash of corrosive sublimate (1–10,000), inserting a rubber drainage-tube. There was now no change in discharge, which was just as feculent as before. There was a natural movement of bowels at this time, with a slight admixture of abscess material. Up to the day of opening the abscess, the temperature ranged from 100° to 102° F., and the pulse from 90 to 100. On the third day after, there was no pain, and in the morning the temperature was 99°, the pulse 84, while at 6 P.M. the temperature was 101°, and the pulse 100, and the patient was taking nourishment well.

On October 14, after ten days during which the wound cleared up somewhat, the pulse was 104, the temperature 99½°. There was on this day a movement of the bowels, and a large fecal discharge from the wound. The next day, there was no fecal matter in the discharge; the patient felt pretty well, and the wound looked better. I now ordered an enema to be given daily to keep the rectum and the lower portion of the colon free, and strictly enjoined the recumbent dorsal position. From this time on, the patient gradually improved, no more feces being discharged through the abscess wound, and regular movements of the bowels being secured by means of injections. I made my last visit November 18, and found the fistulous openings nearly closed. The patient was soon after fully recovered, and she remains, at this writing, June 1, 1888, in a healthy condition.

Now what was the cause of the abscess in this case? And what was the cause of the fecal complication?

In the management of the case, I found no foreign body in the discharges, although of course one may have been present and escaped notice. Had the abscess been located in the *right* inguinal region, over the site of the cæcum, I should have regarded the deposit of some substance in the appendix as the exciting cause. And, although I had no positive evidence of the presence of a foreign body, I am rather inclined to the opinion that some foreign substance *was* the cause of the abscess, as most other causes were eliminated by the process of exclusion. It seems to me, moreover, that the point at which perforation took place must have been the sigmoid flexure of the colon; because of its situation, and because of the large quantity of feces which was discharged from the wound on October 14. This discharge was characteristic of the contents of the colon; indeed, it would have passed well for the usual evacuation from the rectum. Certainly it would have been impossible to have obtained such matter from the small intestine. Taking into consideration the situation of the abscess, as also its character, the case seemed to me of sufficient interest to report.

Then the patient was very fortunate in being able to make so speedy and complete a recovery. Usually in such cases, if full restoration to health takes place, convalescence is tardy and is attended with much inconvenience and discomfort. A case is on record, I am well aware, in which a woman had an abscess opened in the left groin, and eighty ounces of feces came away through the incision, and a very speedy recovery ensued. But this is exceptional. The reporter of the case says: "The above is the only instance we remember in which, some days after the opening of an abscess in the loin, the contents of the intestine came away through the wound, and then the opening in the gut closed completely and permanently, and the patient recovered entirely in three weeks."

I find another case, recorded by a Dr. Thurman, the cause of death clearly determining the cause of the abscess. This abscess formed over the transverse colon, pointing just below the umbilicus. When it was opened, as in my own case, "gas and fetid feculent matter escaped, pus and coagula being mixed with the feces." This patient died soon afterward, of cancer.

The prognosis in abscesses of the abdomen is more unfavorable when they become fecal in character, and they are more or less grave, of course, in accordance with their location.

The treatment of fecal abscess should be conducted upon general and well-established principles, varied only to meet the peculiar requirements of each case. Very active surgical interference is advocated by some, among whom is Mr. Lawson Tait, who thinks that no case should be allowed to run for any length of time after feces have been discovered mixed with the pus. He thinks that the abdomen ought to be opened immediately, and the source of the trouble ascertained and removed. He does not fear interference with the peritoneum. But, unfortunately for both ourselves and our patients, we are not all so confident.

RUPTURE OF STOMACH FROM EXTERNAL VIOLENCE. DEATH IN TWELVE HOURS.

BY O. C. STRICKLER, M.D.,
NEW ULM, MINNESOTA.

On April 21, I was called to see J. M., 65 years old, German, who, while splitting wood a short time before, had accidentally struck himself on the stomach with the handle of an axe. I found a somewhat feeble-looking old man lying in bed in a semi-recumbent position, complaining of very severe gastric and abdominal pain, and in a very weak and collapsed condition.

On inquiry, I found that the patient had suffered with an acute gastric disorder six years before, since which time he had been in quite delicate health, with a difficulty in digesting coarse food. The patient stated that at the time of the injury he felt a sensation as of something tearing in his stomach, and immediately afterward was seized with severe burning pain in the abdomen. This, with the general collapsed condition of the patient, led me to make a diagnosis of rupture of the stomach, and, on account of the opposition to any operative interference, a positively fatal prognosis.

The wife of the unfortunate man laughed at the idea of anything serious resulting from so simple an injury, especially as since his former illness he had had frequent attacks of gastric disorder of a painful nature, and in all he had recovered without medical aid. I explained what in my opinion was the nature of the injury and the inevitably fatal result without operation, but without producing any effect.

I prescribed morphia to relieve the terrible sufferings, and with so much relief that the friends again doubted the correctness of the diagnosis; but in a few hours the symptoms again became grave, vomiting ensued, and death occurred in about twelve hours from the reception of the injury.

At the *post-mortem*, six hours after death, rigor mortis was well developed; nothing else external is worthy of note. Dr. L. A. Fritsche kindly consented to perform the dissection. On opening the peritoneal cavity, a large amount of greenish fluid was seen, with shreds of mucous tissue, showing that the supposition of rupture in some portion of the alimentary canal had been correct. The great omentum presented a very congested appearance, and on further examination a rupture of its substance, sufficiently large to admit a finger, was discovered. After close search and inflation of the stomach, a rupture in the smaller curvature near the pyloric orifice was found.

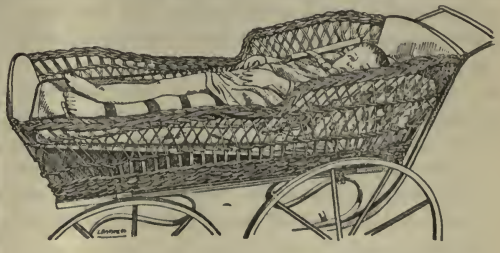
No malignant disease was found in the stomach or other abdominal organs, but, from the appearance of the gastric mucous membrane, I am led to believe that the trouble from which the patient had suffered six years before was of an ulcerous nature, with subsequent gastritis, as points resembling cicatrices were discovered near the pyloric orifice.

I do not think, considering the condition of the stomach *post mortem*, that, had the friends consented to an operation, the result would have been different; and yet this was the only resort offering the possibility of recovery. It is certainly peculiar that a person in so feeble a condition before the accident could so long withstand the severe pain and shock necessarily following so serious an injury.

"POLYCLINIC CARRIAGE" FOR EXTENSION AND COUNTER-EXTENSION.

BY A. B. HIRSH, M.D.,
ADJUNCT PROFESSOR OF ORTHOPÆDIC SURGERY, POLYCLINIC, PHILADELPHIA.

This simple apparatus is designed to keep up continuous traction—therefore, rest—whilst permitting an out-of-door atmosphere. Its first occupant was a stout two-year-old boy, of the flaxen-haired strumous type, the subject of incipient coxalgia.



The value of complete rest in bed, in this disease, and the difficulty, frequently met in practice, of obtaining good hygienic surroundings in so many homes, especially in the stifling city summer season, are familiar facts; so this "carriage" was planned to meet these objects.

Reference to the cut shows an ordinary wickerwork perambulator, the body of which has been lengthened to fit the size of the patient, by dividing vertically and exactly in the middle, the head and foot pieces, which are then straightened out and a new bottom

made—neat wooden painted boards being inserted to fill the spaces at each end. Inside the entire length of the bottom of the body is placed an inclined plane of very light pine board, which rests in front on a block some two inches high and is covered by a light hair mattress and pillow.

The ordinary adhesive strap and stirrup apparatus having been applied on the limb up to the hip (in this case the left one), a cord is fastened to the stirrup, passing through two screw-eyes in the footboard, one opposite the instep and the other at the right-hand angle. Then the cord passes backward to a heavy rubber band attached to a hook screwed into the headboard, alongside and above the child—a weight of three to five pounds being gained by the band's being lengthened twelve to fifteen inches. Any increase of traction can be made by simply further stretching this band, originally intended for closing the opened door.

It was my intention to pass the cord from the stirrup through the footboard and under the body of the carriage, so as to attach a weight; but it is to Dr. H. Augustus Wilson I must acknowledge heartiest thanks for the suggestion of the screw-eyes and rubber band. His improvement, besides simplifying the apparatus and making it more sightly, lies in the important fact that by its use he prevents the otherwise unavoidably painful jarring which is made in passing over gutters and all other uneven surfaces.

In a similar coach since made, I obtained a greater inclination backward by simply screwing a hook underneath the body and fastening another heavy rubber band from it around the rear axle.

The idea can of course be elaborated for more fastidious patients, as the parts needed for the coach are supplied in Philadelphia by Gustavus A. Gefvert, orthopædic mechanist, 250 North Fifteenth Street, and Messrs. Charles Lentz & Sons, 18 North Eleventh Street.

2130 Master Street.

PATENT MEDICINE MAN (to editor)—"You made a nice mess of that testimonial advertisement." *Editor*—"How?" *Patent Medicine Man*—"John Smith wrote: 'Your Live Forever Pellets are doing me a great deal of good. Send me another box;' and I told you to give it a prominent place." *Editor*—"I did—immediately preceding the death-notices." *Patent Medicine Man*—"Yes, and the first death-notice on the list was that of John Smith!"—*Tid-Bits.*

SOCIETY REPORTS.

NEW YORK SOCIETY OF MEDICAL JURISPRUDENCE AND STATE MEDICINE.

Stated Meeting, June 15, 1888.

The Ethics of Opium Habitués.

DR. J. B. MATTISON, of Brooklyn, read the first paper. It was a common opinion, he said, that all opium habitués were liars. He had long held that this view was a mistaken one. In the ranks of these unfortunates, there were some who scorned deceit. His answer to the question Why do men take opium? was that which had been given by an eminent physician many years ago: They took it for a physical necessity. His remarks applied, he said, only to the better class of opium habitués, who, in nearly all instances, had commenced the habit because of a painful disorder of the body or mind. The drug was very commonly first prescribed by a physician who failed too often to place sufficient safeguards around its use, and to warn the patient against its dangers. Granting a painful physical necessity, and the daily or semi-daily use of the drug for weeks or months, and there were very few who could withstand its power. He had seen a man who had faced the cold and hardships of an Arctic expedition, succumb to the influence of opium in four weeks. It was a very common belief that the opium habit was due generally to a vicious tendency, and the subjects of it were ostracized from good society. Thus, when they lied regarding their habit, it was due to the principle of self-protection. But, notwithstanding the disgrace which they would rest under should their habit become known, there were many who refused to take refuge behind the subterfuge of a lie justified through self-protection. He had often found opium habitués who were strict followers of the truth. The commonly accepted view that these people were victims to their own wrong-doing prevented the adoption of correct treatment and led the patients themselves to regard their condition as hopeless. He read part of a letter from a woman who had been cured of the habit, telling of the great difficulty she had experienced in convincing her old neighbors that she had ceased the use of the drug.

DR. MCLAURY'S experience had been that the use of opium had a decided tendency to lower the moral tone and also the judgment

of its victims. He thought the drug had a worse effect in that respect than in any other.

Dr. E. C. Spitzka said it was the first time in his experience that, in the discussion of a medical topic, a better and a poorer class of patients had been spoken of. He did not think it was the experience of any present that the "better class," whether so distinguished because of education, wealth, or social recognition, were less given to animal indulgence than the poorer class. The paper further suffered in that the author had failed to define the meaning of "better class." He had stated that these people lied for self-protection; but, to carry such an argument to its legitimate conclusion, theft, gambling, and almost any crime could be excused on the same ground.

It was true that physicians of experience had very generally called attention to the fact that the opium habitué was a liar; but the reason for his being so was not that he was an opium habitué, but because his *morale* suffered under the influence of the drug, as it did under the influence of chloral, hashish, etc. Dr. Spitzka said that in the great majority of cases the opium habit was contracted through a selfish purpose or vicious tendency, and long after medical indications for its use had ceased to operate. Nine out of ten persons who applied for admission to homes for opium habitués were those who had become acquainted with the drug as doctors, nurses, or attendants in hospitals, not through taking it for long suffering. But the claim had not been made by any scientific authority that the opium habitué was always an habitual liar. Regarding another point touched upon, he might say that in his opinion not more than five out of a thousand persons who had habitually used opium for more than six months could ever free themselves from the trammels of the drug. It was certainly the most fascinating narcotic which had ever been presented to the human species. One of its principal dangers was that the system could become adapted to it. The drug was capable of influencing the descendants of its habitués to an almost incredible degree. Children born of mothers who used morphine became affected soon after birth with delirium and symptoms manifested by those deprived of their accustomed large quantity of alcoholic spirits, and, unless they received morphine, they would die. He thought the paper would have rendered a far better service had it directed attention to the disgusting and demoralizing aspect of the question, instead of placating the vice.

Dr. Wood said that according to his observation persons who were opium habitués were liars with regard to their habit as long as they continued it, but when they entered an institution for treatment, or had become cured, they became as truthful as other people. He thought the habit was not increasing in this country in proportion to the increase in population.

Dr. Nathan Brill endorsed what Dr. Spitzka had said, and added that opium habitués first lied about their habit, and, as their friends tried to reform them, they soon began to look upon them as enemies, and lied about other things. No other drug had as great an influence on the moral sense, and this influence he believed was transmitted from generation to generation.

William A. Purrington, Esq., read a paper on

The Desirable and the Practicable in Legislation Regulating the Practice of Physic and Surgery.

There were persons, he said, who believed the world was governed too much; there were others who would legislate to regulate the fee and the dose of medicine in every case. In considering the practical in medical legislation, it should be remembered that no law could be efficiently administered to which the people generally were opposed. In fact, public need and demand were always in advance of an enforceable law. What is particularly necessary in a medical law is that it should strike the community, especially those entrusted with its enforcement, as being fair. The law should not attempt to decide what is regular and what is irregular medical practice. It should only make general rules, establish certain requirements, and not decide that one sect and not another had a right to practice. But it had been pretty well established that an educational qualification was universally desirable and therefore practicable in any medical law. Such a qualification would not prevent one from practicing homœopathy or other method, although it might result in there being fewer homœopaths. It is desirable to have the examining board independent of the teaching board. All medical legislation should be in the interest of the people, and not class legislation favoring the doctors.

Mr. Purrington, it may be stated, is the very able counselor of the Medical Society of the County of New York.

Special Correspondence.

MEDICAL JOTTINGS FROM THE OCCIDENT.

San Francisco, Cal., May 25, 1888.

I have just returned from a trip over the "Sierras" into Nevada, among the Humbolt Mountains—500 miles from San Francisco—to see a patient. This is a country of magnificent distances; counties as big as States; States as large as empires. In truth, visits of five miles in the East have been attended with more discomfort to me than this run over into our sister State. It is surprising the distances doctors often make in visiting in the sparsely-settled West. From Rye Patch, Nevada—where I visited—it is usual to send to Reno, over one hundred miles away, for a physician. In some parts of the mining-districts, a doctor is engaged to live among the miners, each paying a dollar a month toward his maintenance—the income averaging $1,200 a year.

The climate now and through the summer, on the plateau of Nevada, is bracing and delightful. A tired-out doctor or a nerve-worn patient would find Reno, at the base of the Sierras, or Truckee, on the slope, or Lake Tahoe, most pleasant and healthful.

We certainly can claim a glorious climate on the Pacific Slope; but some people, among whom are certain physicians, have an exalted opinion of its curative value.

On my way home from Nevada, there was a lad of eighteen years, in the very last stages of consumption, aboard the train, *en route* for California, sent out, as he says, by friends and *his doctor*. Now, this is crowding climate a little too hard. It was a sickening sight to see the utter helplessness of this poor boy, depending upon the sympathy of travelers for his every want and movement—filled with false hope—deluded into the belief that California is the consumptive's paradise—once here, all would be well. What a pity he cannot die among friends and relatives. He will swell our already heavy death-rate from phthisis pulmonalis; for it is a fact that the death-rate from lung-diseases stands at the highest in SanFrancisco. It is true, many of the cases are imported; nevertheless, it is a proof that the climate did not heal. Each county in this State, through the circulars of the Board of Trade, goes into particulars of the peculiar virtue of its especial climate. The entire subject of climate in California, however, can be made very simple. The daily *Call*, in commenting on

"California as a Sanitarium,"

Quotes Dr. J. W. Robertson, Assistant Physician of the Napa Asylum, as saying: "In this State there are three distinct belts of climate, with wholly different therapeutic influences. Invalids who would derive benefit from one of the three might be unfavorably affected by the two others." Dr. Robertson classifies them as coast, valley, and mountain, and explains the qualities of each:

"The coast-belt extends over eight degrees of latitude, but is only from ten to twenty miles wide. In it, snow is phenomenal and frost rare, and, owing to the Japan current, it enjoys a temperature more uniform throughout the year than that of any other part of the world of equal size. Winter is warm and summer is cool, and the fresh salt air from the sea acts like a tonic on the system. It goes without saying that such a climate must be beneficial to a large class of invalids. But it is not without its drawbacks. The fierce heat of the Sacramento and San Joaquin valleys rarefies the atmosphere and causes a constant rush of sea-air through the Golden Gate to fill the vacuum; hence, for several months in summer, clouds of sand and dust sweep through the streets of San Francisco, and all along the coast-line damp fogs roll in, which chill the invalid to the marrow. These conditions indicate the class of invalids who are likely to benefit by a residence on the coast. Such are especially persons suffering with malaria in any form. Malaria does not originate here, and, when brought here, it usually succumbs to the climate, without medicine. It has also been noticed that patients attacked with kidney-troubles, or suffering with visceral lesions resulting more or less indirectly from malaria, derive benefit from a residence on the coast. Along the whole coast, except in large cities, endemic and epidemic diseases are unknown; and, if there is any merit in the theory that the searching west winds blowing in from the sea act as a germicide, all diseases of bacillary origin should be checked by a residence on this coast. On the other hand, there is no doubt that the coast-climate is injurious to invalids suffering with rheumatic troubles. These seem to be aggravated by the harsh winds and the raw fogs. It has also been noticed that the coast-climate affects unfavorably patients suffering with biliary diseases.

"The therapeutic quality of the two other belts is more easily determined. The

mountain-belt can safely be recommended in almost all diseases; its pure air, its bracing winds, its cool temperature, and, if used discreetly, its mineral waters, are almost always beneficial. The valley-belt has the disadvantage of combining excessive heat, and, in certain locations, malaria, and not infrequently diphtheria and other endemic diseases; the judicious searcher for health will select, if he prefers that belt, locations sufficiently elevated to be beyond the reach of miasma, and free from the exhausting heat of the plains."

In commenting on California as a sanitarium for consumptives, Dr. Robertson pointedly observes that, if consumption proceeds from the presence of a disease-germ, a germicide, and not a climate, is essential for a cure. Still, there is no doubt that consumptives in the incipient stage do derive benefit from a residence in parts of California. The place to choose is one of the health-resorts which have been established in the interior valleys, some two or three thousand feet above the sea, where outdoor exercise is possible in all weathers, and the air, naturally pure, is impregnated with the balsam of pine and fir trees. In such resorts, consumptives may recover perfect health, or, at any rate, may enjoy many more years of life than they would have had in any of the States of the East.

A peculiar effect of the climate in San Francisco is to twist about the medical courses. The announcement of the Cooper Medical College says:

"The regular course commences on the first Monday of June of each year, and continues until November. It is thus a summer course, contrary to general usage. In San Francisco, the disadvantages attendant upon such a plan do not exist. The heat is never oppressive or enervating; on the contrary, the sea-winds are bracing and invigorating. There are no rains during the lecture-months; the atmosphere is dry, and temperature rarely above 70°, while it ranges considerably lower. These circumstances tend to prevent decomposition, and add many advantages to the prosecution of dissection."

This same plan holds true of the medical department of the University of California. Both of these schools demand a three years' course.

There is also a Hahnemann Medical College in this city; but, from all I can learn, it cuts a very small figure. In fact, homœopathy does not seem to be in a vigorous condition here. It is customary in the East to speak of the great popularity of this "*ism*" in the West. I am quite sure that the cream of the practice in San Francisco is in the hands of the regulars, *and, after them, of the traveling quacks.*

The town has just been visited by a graduate of the Women's Medical College of Pennsylvania—a lecturing-tour, with visits at the hotel; and, I understand, she claims in a few weeks to have carried $20,000 away.

Yours truly,

C. C. Vanderbeck, M.D.

Periscope.

Case of Charcot's Disease.

At the meeting of the Medical Society of London, March 26, 1888, Dr. C. E. Beevor showed a patient fifty-three years old, a carpenter, who was suffering from locomotor ataxia with disease of the left shoulder-joint. There was no history of syphilis. Two years ago, he suffered from weakness and giddiness, with shooting pains in the legs and then in the arms; for eighteen months he had been subject to frequent flatulence and eructations; for one year he had difficulty in walking in the dark; and for the last four days he had œdema of the left arm. At present he had only slight staggering with the eyes shut and was unable to walk "toe and heel" along a straight line; he had slight lightning pains in the legs, and especially in the arms, and sometimes also in the head. The pupils were small; they reacted to accommodation, but not to light; the knee-jerks were absent, and there was no anæsthesia of the legs. Eight weeks before (January 30), the patient noticed that the left shoulder began to swell, but without pain; he never had suffered any injury in it. At the time of the report (March 26), the joint was much enlarged, distended with fluid, and grating could be obtained; the head of the humerus could be felt with difficulty, but it did not seem to be wasted. The disease probably involved especially the upper part of the cord, as shown by the lightning pains in the arms and head, the slight amount of staggering with the eyes shut, the absence of anæsthesia in the legs, and the affection of the shoulder-joint. He had no attacks of vomiting, but suffered from frequent flatulence.—*Lancet*, March 31, 1888.

Spontaneous Evolution of Face Presentation into Vertex Presentation.

Frömel reports in the *Wiener med. Presse*, February 12, 1888, the following case from

the obstetrical wards of Prof. Breisky. A multipara, whose previous labors had been normal, presented, when admitted to the hospital, the following points of clinical interest: Examination of the pelvis showed a slight contraction of the external diagonal conjugate; the promontory of the sacrum was readily reached; the uterus was deflected to the mother's right side; the back of the child was on the mother's left side, the face presented, the forehead being on the left side and the chin directly opposite upon the right; the head was high in the pelvis and freely movable.

The patient was ordered to lie on her left side, to rectify the position of the uterus. Three hours after the first examination, the membranes ruptured spontaneously, and the vertex presented, in first position, with the right arm. While efforts were being made to replace the arm, delivery occurred spontaneously. Frömel thinks that the following predisposing causes of face presentation were present in this case: The patient was a multipara; the uterus was deviated from its normal position toward the mother's right side; the head was large, and, while the membranes were intact, it remained obliquely at the superior strait, its posterior circumference resting against the left ilium; the occiput thus encountered greater resistance than the forehead, which descended first; prolapse of the arm was present; the head was large, but not dolichocephalic; the liquor amnii was abundant. The evolution of the face into the vertex presentation was effected by the contraction of the distended uterine muscle upon its left side, and favored by the position which the patient assumed, lying on her left side.—*American Journal of the Med. Sciences*, April, 1888.

Influence of Turpentine upon the Blood and Nutrition.

At the meeting of the Therapeutical Society of Paris, April 11, 1888, M. Brémond made a communication upon the influence of the turpentine treatment upon the richness of the blood in oxyhæmoglobin and upon the activity of reduction of this oxyhæmoglobin. He reported observations made upon three phthisical patients, who had undergone the turpentine treatment. The blood was examined by M. Hénocque in two of these patients, and the clinical results of the treatment were controlled by Dr. Fernet. The quantity of oxyhæmoglobin, its activity of reduction, and the weight of the patients were carefully noted during the continuance of the treatment. Microscopic examination of the sputa showed a marked diminution, and even a disappearance, of the bacilli which were present at the beginning. The increase of oxyhæmoglobin in these three observations confirms the opinion of M. Brémond as to the good effects upon nutrition of the turpentine treatment. These good effects are the result of more exact oxidation, due to a transformation of the oxygen of the blood into ozone by the turpentine which has penetrated into the torrent of the circulation. —*Gazette Hebdomadaire*, April 27, 1888.

Overwork of the Heart in Apprentices.

At the meeting of the Society of Public Medicine and Professional Hygiene, March 28, 1888, M. Layet, of Bordeaux, stated that he had had several recoveries from purely functional cardiac troubles occurring in young workmen of fourteen or seventeen years of age. They occur nearly always, he says, as the sequel of fatigue caused by work, without this work having been beyond the strength of the young men. It ceases upon rest, and reappears when the work is resumed and continued.

M. Layet explains this affection by saying that at the period of puberty the heart grows especially in volume, and this is the more rapid according as the period of the establishment of puberty is itself more rapid. Moreover, at this time the organism is in a condition in which it is less able to resist fatigue. It therefore follows that any work tending to increase the functional movement of the heart during this period can but favor the physiological tendency of this organ to dilate, and dilate at the expense of its contractile power, hence the signs of a nervous exhaustion, and not those arising from organic wear and tear.—*Bulletin Médical*, April 22, 1888.

Spontaneous Hemorrhage from a Normal Conjunctiva.

Perlia reports to the *Münchener Med. Wochenschrift*, No. 8, 1888, the case of a domestic, seventeen years old, who was subject to bleeding from the left conjunctiva; this occurred since she was two years old, upon severe bodily exertion, especially in a stooping posture. Violent beating of the heart and dizziness preceded it, and there was dysmenorrhœa. During the bleeding the color of the face was cyanotic, and the venous plexus of the conjunctiva was strongly

injected. The blood flowed from a large vein over the little lachrymal sac close to the middle palpebral ligament. By correcting the condition of the body, the bleeding ceased after some time. Perlia, in the absence of any local cause to account for the hemorrhage, believes that it must be referred to the dysmenorrhœa, as both happened at the same time at the beginning of puberty, and also, as is well known, congestions about the head are frequently connected with anomalies of menstruation.—*Centralblatt für die med. Wissenschaften*, May 12, 1888.

Nodular Rheumatism and Muscular Atrophy.

It has been asserted by Charcot, says the *Lancet*, June 2, 1888, that there exists no necessary relation between the intensity of the articular disease and the atrophic changes in the muscles. Parizot, basing his conclusions on a large number of facts, admits that a simple hydrarthrosis, neither inflammatory nor painful, may be followed by muscular atrophy in all respects like that which accompanies the most intense forms of arthritis. In these cases the rule is to find no reaction of degeneration, but marked exaggeration of the reflexes, indicating an excessive excitability of the spinal cord. These facts were well attested and confirmed by the paper communicated to the Royal Medical and Chirurgical Society by Dr. Archibald Garrod. Ollier and Mondan believed that functional inertia, as well as nutritive derangements in the epiphyses, accounted for the amyotrophy. But Sir James Paget long ago showed that mere disuse was insufficient to account for the atrophy resulting from surgical diseases of bone. Mayet and Cuilleret believe that there are nervous lesions to account for the amyotrophy.

Cancer of the Stomach in a Girl Seventeen Years Old.

H Köster, in reporting this case in the *Upsala Lakäre förenings Förhandlingar*, Bd. XXIII, Heft 4 und 5, remarks that the case deserves notice for the interest which it has as bearing upon modern operations on the stomach, and also for the rarity of cancer in a person so young. The patient, whose father had suffered from disease of the stomach, but who was otherwise free from hereditary taint, was taken sick early in 1887, with vomiting of blood, which, however, never had the well-known coffee-ground appearance. Associated with the vomiting, which recurred at irregular intervals, were emaciation, and shortly before her admission to the hospital, May 8, an eruption of petechiæ scattered over her whole body. The stomach was decidedly dilated, and at times a tumor could be felt in the epigastrium; there was no tenderness or pain accompanying it. The gastric juice contained no free hydrochloric acid. There was some thickening in the right upper lobe of the lung, but the sputa contained no bacilli. Death occurred in the latter part of June, the patient then weighing 13.5 kilograms. At the autopsy, besides numerous nodules of cancer scattered over the peritoneum, there was found an ulcerating scirrhus of the pylorus, the canal of the latter being extremely narrowed. There were no other metastatic growths. In the right upper and middle lobes of the lung was found a decomposing thrombus.—*Centralblatt für Chirurgie*, May 19, 1888.

Pernicious Eclampsia.

At a recent meeting of the Imperial Royal Medical Society of Vienna, Professor Gustavus Braun reported a remarkable case which he had the opportunity of observing at his clinic, during the month of March of the current year. A woman, twenty-eight years old, who had already been confined twice, and frequently suffered from peculiar spasmodic attacks, was, on March 17, admitted into his clinic in an unconscious condition. She was then in the seventh month of pregnancy, and suffered with typical eclamptic attacks. The patient was exceedingly pale, with slow respiration; pulse, 68; she foamed at the mouth, and had bitten her nether lip. There was much albumin in the urine, and a few casts. As labor had already begun, and the cardiac sounds of the child could not be heard any longer, rapid delivery of the woman by operation was determined upon. The child was extracted, the placenta artificially displaced, and artificial respiration practiced upon the patient. Death, nevertheless, occurred, owing to pulmonary œdema. Dr. Paltauf reported on the results of the post-mortem examination of this interesting case. A great quantity of liquid blood was found in the abdominal cavity; the hepatic capsule was detached by a layer of blood. The liver was enlarged throughout; the hepatic tissue was yellow, and pervaded by small blood extravasations. Interstitial nephritis, cerebral œdema, and general

anæmia were, moreover, present. The blood was unusually liquid. Dr. Paltauf mentioned some similar recent observations, and quoted the publications of Virchow, of the years 1881 and 1882, on cases of poisoning with sea-mussels, in which similar changes of the liver as in the case above mentioned were found to be present. Dr. Braun excluded poisoning with phosphorus and the presence of pathogenic bacteria, and arrived at the conclusion that they had to deal with a peculiar case of pernicious eclampsia, which was probably due to poisoning. In such cases the chemical poison entered the intestine and the liver; it afterward gave origin to a capillary phlebitis, stasis, blood extravasations, and even to partial necrosis of the tissue. As nephritis was present in all these cases, an elimination of the poison could not take place, and rapid death, for this reason, invariably occurred. The detachment of the hepatic capsule and the hemorrhage into the abdominal cavity were to be explained by the changes of the liver and the results of the artificial respiration.—*Medical Press and Circular*, May 16, 1888.

Peculiar Form of Keratitis Occurring in Intermittent Fever.

Van Millingen describes in the *Centralblatt für Augenheilkunde* a peculiar form of inflammation of the cornea which occurs in intermittent fever. This manifests itself in the form of a superficial erosion at the temporal border or more rarely at some other peripheral part of the cornea; and this erosion is occasioned by loss of epithelium in a spot of irregular outline. The area so deprived of its epithelium is at first clear, but soon becomes cloudy and shows irregularities. By destruction of the epithelium at the border of the ulcer, the latter enlarges until it reaches or even passes beyond the pupillary area. Soon after complete destruction of the epithelium, deep infiltration occurs in the affected area. The ulcers which occur in the second stage of the disease have no disposition to perforate the cornea. Around the infiltrated spots are formed streaky, radiating, or stellate prolongations, which extend into the clear portions of the cornea. The iris and choroid take no share in the inflammation. The symptoms are different, according to the stage of the disease: in the beginning, there is local pain and a feeling as of a foreign body in the eye, together with lachrymation and dread of light; in the second stage, there is ciliary neuralgia. The symptoms, however, in neither stage are constant, and even pain may be absent. A constant and very important symptom is anæsthesia of the cornea, which may even extend to unaffected parts of the latter, and which sometimes persists a long time after complete healing has occurred. The whole process is a sluggish one, the ulcer having a tendency to enlarge rapidly. A disposition to reparation is slow in making its appearance. The first indication of it is vascularization at the border. The result of the disease is very serious, as regards the function of the affected eye. A dense opacity of the central part of the cornea is a frequent result. Recovery occurs through cicatrization. Frequently large facets are left upon the cornea. The clear areas are beset with stellate opacities, so that there is little prospect of a successful result from an iridectomy. In all cases the connection of the affection with intermittent fever was proved, and recovery from the fever secured through the use of quinine, which also checked the progress of the eye-disease. —*Wiener med. Presse*, May 13, 1888.

Peculiar Syphilitic Affection of the Conjunctiva.

At the meeting of the Verein Deutscher Aerzte in Prag, March 16, 1888, Prof. Sattler stated that syphilis of the conjunctiva is extremely rare, as, among the many thousand patients seen by him, this affection had come under his notice but once. From the small number of trustworthy observations of this disease which have been made, it is learned that the affection occurs as the chancre, the papular syphilide, and the true gumma. In connection with the two cases of syphilitic conjunctivitis very recently communicated by Goldzieher, and with an older case of Macauley's, Sattler reported a singular observation which he had had the opportunity of making while he was assistant at the clinic of Arlt in 1873.

The patient was an anæmic woman, forty years old, whose pale but otherwise little-changed conjunctiva was occupied with a large number of granules of different sizes, which were seated in the conjunctival folds of both eyes. The affection was regarded as trachoma, and treated as such, but without success. When the patient subsequently came to the clinic, she presented pronounced symptoms of constitutional syphilis. Energetic antisyphilitic treatment caused the complete disappearance of the conjunctival affection. This cleared up the nature of

the disease, and, besides, a piece of tissue examined under the microscope showed a very different appearance from that seen in trachoma. The granula exhibited peculiar growths of endothelial elements.—*Wiener med. Presse*, May 6, 1888.

Mode of Action of Cocaine.

At the meeting of the Biological Society of Paris, May 5, 1888, M. Ch. Richet stated that he had been making some experiments to determine how the epileptic convulsions, which follow the administration of large doses of cocaine, are produced. He first found that the dose necessary to produce convulsions in the normal state was in the ratio of one-third of a grain to each kilogram of body-weight of the animal. Having cut the spinal cord before giving the drug, and found that the convulsions did not occur, it was clear that they were not caused by any action upon the cord. To determine upon what part of the brain it acts, he removed a large part of the motor zone. He then found that, while the convulsions were still produced, they changed their form, becoming more clonic, and that the dose of cocaine necessary to produce them was considerably larger—one-half to four-sixths of a grain for each kilogram. The conclusion from these researches is that cocaine provokes convulsions by its action upon the whole mass of the brain, but its predominating influence is probably exerted upon the motor nerve-cells of the cortex.—*Bulletin Médical*, May 13, 1888.

Trephining for Paralysis.

At the meeting of the Medico-Chirurgical Society of Edinburgh, February 15, 1888, Dr. Felkin showed a patient of his who had been trephined by Mr. Hare, over the motor areas of the brain, for localized paralysis. There was commencing return of the lost functions. The patient was a girl, 17 years old, who had received a fracture of the skull when ten months old. The right arm and leg were almost completely paralyzed; they were shorter than the left arm and leg, and badly developed. The temperature was 2° lower than on the left side; the reflexes were exaggerated, and sense of locality and tactile sensation were absent. At the operation, which was performed a month before, a large cyst, which extended to a depth of two inches from the surface of the skull, was found, and also an osteophytic growth, which extended inward half an inch toward the surface of the brain. The patient made a good recovery. She walks better, can move her arm to a considerable extent, and both reflexes and temperature now correspond on both sides of the body. The case will be published in full at some future date.—*Edinburgh Med. Journal*, May, 1888.

Rupture of Vermiform Appendix; Laparotomy; Recovery.

Dr. Brenner, assistant to Professor Von Dittel, recently showed a patient before the Imperial Royal Society of Physicians, at Vienna. He was nineteen years old, and had been admitted into Professor Von Dittel's clinic in March last, with symptoms of severe intestinal obstruction. The history of the case and the intense pain in the cæcal region led them to conclude, with a certain degree of probability, that they had to deal with perityphlitis and consecutive suppurating peritonitis. Laparotomy was performed on the day of admission. After opening the abdomen, a great quantity of pus escaped; the intestines were washed with a solution of salicylic acid; and, on close examination, it was found that there was an abscess in the region of the cæcum, around the vermiform appendix, which was perforated. The vermiform appendix was ligatured and removed. The part of the cæcum which had become affected by the suppurating process was drawn forward and fixed to the abdominal wound by means of sutures, as resection of the intestine could not be done, owing to the collapsed state of the patient during the operation. The abdominal wound was closed, and healing took place by first intention. Three other cases of suppurating peritonitis following perityphlitis were treated in the wards of Professor Von Dittel by laparotomy, but all ended fatally. Dr. Brenner remarked that the recent advance in the surgical treatment of these cases consisted in the fact that operation was resorted to at an early date, and that the affected part of the intestine was removed from the abdominal cavity. This was the first case of healing after resection of the vermiform appendix, when general peritonitis was already present.—*British Medical Journal.*

—A hospital for the treatment of diseases of the throat, nose, and lungs is to be built in Brooklyn.

—The British Medical Association will hold its fifth annual meeting at Glasgow, beginning August 7.

New Theory as to the Origin of Ulcer of the Stomach.

In the *Nordiskt med. Arkiv*, Bd. XIX, A. F. Rasmussen states that at autopsies he has usually found a furrow upon the stomach, which he is disposed to attribute to pressure from without and to compare with the furrow from lacing, which is found upon the liver. In some cases he has seen such a furrow extend from the liver across the stomach and upon the descending colon. Along the indented part of the stomach Rasmussen found the serous coat thickened, while the mucosa was atrophied. He offers the hypothesis that pressure upon the stomach in all or at least many cases is the cause of the formation of ulcer. He bases this hypothesis upon the observation that symmetrical scars following ulcer of the stomach are often seen upon the anterior and posterior walls of the stomach, and that they have their seat for the most part in the smaller curvature, and more frequently on the posterior than the anterior wall—places which are especially exposed to pressure, while the greater curvature is more movable.—*Deutsche med. Wochenschrift*, May 17, 1888.

Myositis Ossificans.

Dr. A. A. Lendon, of Adelaide, has recorded in the Transactions of the First Intercolonial Medical Congress (August and September, 1887) the particulars of a remarkable example of the very rare disease, myositis ossificans. The paper is the more valuable since it comprises full anatomical details, with illustrations of the skeleton of the subject. The man died at the age of forty-six, having first shown signs of the affection when only eight years old; but he had always been clumsy with his right arm and forearm, and as during boyhood the stiffness increased, it was attributed to injuries received at various times. He became greatly deformed, with bent rigid back and limbs, and before his death he suffered from numerous bed-sores, and was reduced to a pitiable state. Many muscles were partially or wholly converted into bone, notably both latissimi, which caused the scapulæ to be firmly fixed to the thoracic cage. In the limbs the joint surfaces were fairly normal, or the cartilages in fibroid degeneration, although the joints were greatly surrounded by irregular masses of bone due to ossification of muscles and ligaments. The spinal and costal ligaments were all ossified, making the back quite rigid. Dr. Lendon also quotes an interesting description of a similar case from a work on the city of Cork, by Charles Smith, published in 1750, and reproduces the engravings that represent the skeleton of this case. Reference is made to Mr. Sympson's paper on the subject, to the case described by Mr. Cæsar Hawkins, to the specimen in the Hunterian Museum, and to some recently-recorded cases, which, however, lack the post-mortem evidence which renders Dr. Lendon's essay so important to the pathologist.—*Lancet*, April 21, 1888.

Epidemic of Sore Throat in Edinburgh and its Relation to the Milk-Supply.

At the meeting of the Edinburgh Medico-Chirurgical Society, June 6, Dr. G. Sims Woodhead and Mr. J. M. Cotterill read a paper of much interest on a curiously limited epidemic of sore throat, and suggested a relationship with the milk-supply. Mr. Cotterill was called to attend successively a large number of cases of sore throat occurring in an educational institution in the city. The grouping of the cases raised the suspicion of infection from a common source, and, after careful exclusion, Mr. Cotterill came to the conclusion that the mischievous factor was to be found in the milk-supply. This was accordingly suspended, when the sore-throat epidemic quickly disappeared. When the milk was recommenced, sore throats of a similar character appeared again. Then all the milk was boiled before use, when the epidemic similarly yielded. Dr. Woodhead's attention was accordingly called, and he instituted a careful examination into the condition of the cows from which the milk-supply in question was obtained. Most of the animals showed unmistakable signs of cow-pox in the scab stage. One cow, which had been separated from the rest as specially healthy, and whose milk was devoted to the use of a hand-fed child, showed similar appearances. On inquiry, it was discovered that the child too, as well as other persons who had partaken of the special milk, suffered likewise from sore throat of similar character. The clinical evidence thus appeared strongly to support the view that the milk was the medium of infection from the diseased animals. Dr. Woodhead then undertook a series of cultivations and inoculation experiments. He examined the matter from the teats of three of the diseased cows, and found streptococcus pyogenes in all; further a very small bacillus in the discharge from two,

and several other organisms in that from one. In the matter from the tonsils he discovered the streptococcus pyogenes, the slender bacillus, and a very small micrococcus. In two instances there was found, in addition, the short thick bacillus. By cultivation from these and from the milk, no less than fourteen distinct organisms were separated. Of these four were common to the milk, to the discharge from the sores, and to the tonsils, while seven were found common to the milk and the sores. It is possible that some of the others may be found common to the three sources, but so far they have not yet been obtained pure. Inoculation experiments were conducted on rabbits with the several pure cultivations whose derivation has been detailed. The results so far obtained have been entirely negative, the staphylococcus pyogenes amongst others not producing any effect, except a very slight amount of swelling and transient redness at the seat of inoculation. Inoculation was made by means of subcutaneous injection into the rabbit's ear.—*British Med. Journal*, June 9, 1888.

The Eye in Chorea of Childhood.

Dr. G. E. De Schweinitz, in a communication to the *New York Medical Journal*, June 23, 1888, based on an examination of fifty cases of chorea of childhood, gives the following conclusions, which he thinks are justifiable:

1. The irides of choreic children quite commonly present chromatic asymmetry in shade, just as the same condition has been found in other forms of nervous disorders. 2. Slight differences in the width of the pupils may be observed, but not more frequently—in fact, not as frequently—as these have been noted in perfectly healthy individuals. 3. Facial asymmetry is present in about one-half of the cases, just as this is present in cases of high refractive error, and also in individuals perfectly free from nervous disorders. 4. Hypermetropia and hypermetropic astigmatism are vastly the preponderating conditions of refraction in the eyes of choreic children, being found in about 77 per cent. of the cases, exactly as hypermetropic refraction is the preponderating condition in childhood generally, being found in 76 per cent. of the eyes of children in the elementary school years. 5. Imperfect equipoise of the eye-muscles is found in the great majority of the cases, but imperfect equipoise of the eye-muscles is very frequently present in the eyes of school-children free from chorea or neuropathic tendencies. 6. Embolism, atrophy of the disc, and optic neuritis may occur during or after attacks of chorea, but appearances in the fundus oculi characteristic of the disease have not been found. 7. As Octavius Sturges remarks: "It seems certain that a fairly constant proportion of chorea is directly connected with what may be called injudicious schooling, . . . but such nice adjustment as shall prevent overstrain on the one hand and overindulgence on the other is practically unattainable." Certainly an endeavor to lessen the overstrain of the eyes should be made; hence the refraction-errors and muscular defects in these children should be carefully and fully corrected by glasses, by prisms when necessary, or even by judicious surgical interference, and thus a probable exciting element removed; just as we should perform the same service for eyes similarly afflicted in children who are not choreic; just as we should improve the hygiene, remove the anæmia, treat the disabled circulatory apparatus in children who are choreic. Evidence, however, seems quite as lacking that hypermetropic refraction is the basal cause of chorea as it is that the chorea is the cause of the hypermetropia.

Remarkable Case of Narcolepsy.

Dr. Caton has recently had a remarkable case of narcolepsy in the Liverpool Royal Infirmary. The patient was a man thirty-seven years old. He would fall asleep while standing, when selling articles in his shop, or even when walking in the streets. If he attempted to read or to sit in a chair, he invariably fell asleep in a moment. During sleep, a spasmodic closure of the glottis always took place, lasting nearly a minute. Violent contraction of the diaphragm and other respiratory muscles would come on, increasing in force, and the patient would get more and more cyanosed, until at length the violence of the inspiratory efforts partially roused him, and the spasm of the glottis yielded. Loud noisy respirations would now come on, and the cyanosis would disappear, to be followed by deep sleep and the same round of symptoms. This condition has existed for six years, and the seizures continually occur by day and by night. When awake, the patient is perfectly intelligent, and there is no evidence of organic disease. The kidneys are healthy, and secrete abundance of urea. Dr. Caton supposes that the symptoms are due to the formation of some narcotic alkaloid in the alimentary canal or the blood, and this view

was strikingly confirmed by the results of treatment, most benefit being derived from a limitation of diet and the administration of charcoal and naphthaline three or four times daily. Under this treatment, the drowsiness diminished considerably, and the spasm of the glottis disappeared altogether; but, when the treatment was suspended for some time, the symptoms returned.—*British Medical Journal*, June 9, 1888.

Etiology of Aortic Aneurism.

Dr. Karl Malmstein, of Stockholm, has published notes of one hundred and one cases of aortic aneurism occurring in his own practice, or in that of other Swedish physicians, with the view of elucidating to some extent the causes of this affection. He remarks, however, that it is impossible to say how many persons die of aortic aneurism, for the condition is very frequently not diagnosticated, and the cause of death is returned as due to cardiac disease, hemorrhage, or other ill-defined cause. As to the seat or seats of the aneurisms in the cases collected, information could be obtained in only ninety-two instances. Of these, eighty-three were single, the arch being affected in fifty-seven, the descending aorta in seventeen, the abdominal aorta in four, and the arch and the descending aorta together in five. In eight cases there were two distinct aneurisms, and in one case three, two of them on different parts of the arch and one on the right coronary artery. These statistics fully bear out the observations of other physicians as to the greater liability to aneurism of the portions of the aorta nearest the heart. Dr. Malmstein also confirms the remarks of Stokes as to the want of connection between aneurism and cardiac hypertrophy. In about 80 per cent. of the cases, the existence of syphilis was definitely made out. There were but five cases in which gout or rheumatism existed, and in only five could alcoholism be assigned as a cause; besides, it is remarked that in the Swedish military hospitals, though alcoholism is yearly decreasing, the number of cases of aortic aneurism show an upward tendency. The cases of aortitis chronica petrificans, or senile degenerative change, were few in number, and there was only one instance of a traumatic nature. Several beautifully executed engravings, illustrating syphilitic lesions classed by the author as aortitis sclerogummosa, are appended to the work.—*Lancet*, May 26, 1888.

Etiology of Purulent Bronchitis.

Professor S. V. Levashoff describes in the *Ejenedêlnaya Klin. Gazeta* an interesting case of purulent bronchitis occurring in a medical man, which may help to throw some light on the etiology of this disease. The patient was a man fifty-three years old, who had always enjoyed good general health, and had had no diseases of the respiratory organs, but had suffered occasionally from attacks of quinsy. In October last, after having been on a long journey in Siberia, he began to suffer with rigors at night and sweats in the morning. Some days later, cough came on, and he noticed a very foul smell in his mouth; he also began to expectorate a quantity of dirty gray mucus, which had the same foul odor, the sputum at times containing small lumps looking like bits of half-burnt rag. When he came under Professor Levashoff's care, he was evidently suffering with purulent bronchitis, the chief seat of the affection being in the left lung. Professor Levashoff took the utmost pains to find a means of accounting for the invasion of the disease, and at last came to the conclusion that something must have been introduced into the lungs from the outside which had caused the purulent secretion. On questioning the patient, he found that, when traveling in Siberia, in order to protect himself from the severity of the weather, he had covered himself with furs, felt mats, and other articles which are capable of conveying septic material, and it was doubtless in this way that the purulent bronchitis was brought on. The treatment adopted consisted chiefly of turpentine and carbolic acid inhalations, terpine, quinine, and narcotics internally, and energetic frictions with turpentine and lard over the chest. The disease presented a regular series of rises of temperature, with every third day copious discharges of purulent sputum, sometimes mixed with large quantities of blood. Notwithstanding all these very grave symptoms, complete recovery took place.—*Lancet*, June 9, 1888.

His Diagnosis.—"Got a cold, Hyson?" inquired Mr. Orrico Root of young Hyson, the other day. "Tell you what will stop it in five minutes—" But Hyson interrupted him. "I had a cold," he said, "the beginning of the week. What I've got now is a five-minute cure that a fellow gave me on Monday. Looks like a cold, though, don't it?"—*Puck*.

THE

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ELECTION OF A WOMAN TO THE PHILADELPHIA COUNTY MEDICAL SOCIETY.

On Wednesday, June 20, the Philadelphia County Medical Society elected Mary Willits, M.D., to active membership. This marks an epoch in medical affairs in Philadelphia. For years the friends of women physicians have endeavored to bring about the election of women to the Society. Over and over again the names of reputable and estimable women have been proposed, reported favorably by the Censors, and then been rejected by the Society. Conservatism was so strong that some of the best representatives of the best medical college for women in the world were repeatedly refused admission to the society of the county in which it is located. Unwearied patience and unremitting perseverance have, however, at length led to the usual result, and the Philadelphia County Society has broken down the barrier which so long separated it in this respect from the practice of other influential medical societies.

The occasion is one for congratulation to those who believe that women physicians should not be debarred, on account of their sex alone, from membership in societies which are intended to include all reputable physicians and which are parts of the American Medical Association. There are medical societies so constituted that they may, with entire propriety, decline to admit to membership any candidate for any reason which seems to them good. But, in our opinion, the County Medical Societies are not of this number, and should admit all candidates whose standing as physicians and as individuals is good, except for reasons which would be recognized as sufficient by the mass of the profession.

For years the Philadelphia County Society has held a different opinion, and has refused to abandon it under very strong pressure. But at last, the most conservative society in the country has changed its mind.

This is a conclusion the importance of which is enhanced by the deliberation with which it has been reached. The election of a woman here and now means much more than it could have meant if the result had been secured at the first effort; and those who have labored and waited for it have achieved a success which will be all the dearer for all it has cost them.

Those who have opposed this result have reasons which are entitled to great respect; but these reasons are out of harmony with the spirit of the age, and they must give place to the force of numbers. Happily, the result of the last test-vote has not given rise to indiscreet jubilation on the one hand, nor to feelings of resentment on the other. The keynote of the state of affairs has been struck by Dr. John B. Roberts, who in a letter to the Philadelphia *Ledger* makes this graceful acknowledgment: "In regard to the recent admission of a woman physician

to the Philadelphia County Medical Society, it is but justice to say that we owe her election largely to the forbearance, good-will, and great-heartedness of our friends, who have for so many years *successfully opposed* our efforts to gain recognition of women physicians in that body."

Thus, then, we chronicle this interesting event, and express the hope that its results will justify the expectation of those who brought it about, and convince those who conscientiously opposed it that it was right and good.

INCONTINENCE OF FECES.

From all points of view, incontinence of feces is a more unfortunate condition than incontinence of urine, and when it is well marked the patient becomes such a continual source of annoyance both to himself and to his friends that life is a burden. In aggravated cases, he can never feel himself safe in leaving home, so that by degrees his health is impaired through lack of fresh air and exercise, while his mental habit becomes one of settled melancholy. In this distressing condition, he is apt to catch at any method of treatment which seems to offer a chance of cure, and is exceedingly fortunate if he falls into the hands of an honest and skillful surgeon.

Sometimes involuntary discharges of feces are the result of sudden nervous impressions; but there are some cases which admit of surgical treatment. In regard to these, Mr. Herbert William Allingham makes some very important suggestions in the *Medical Press and Circular*, May 23, 1888.

Before speaking of the treatment, Mr. Allingham devotes a few words to the causes of this affection. He first takes up the case in which, in an operation for fistula, too deep a cut has been made through both sphincters, and says of it that the wound may heal in such a manner as to leave a deep sulcus. The result of this is that the continuity of the sphincters is interrupted at one point and their edges are curled outward by the contraction of the scar. As this contraction increases, there is a loss of muscular power, a widening of the sulcus, and gradually a loss of the muscular sense in the part, so that the patient is no longer able to appreciate the contact of feces until it is too late to prevent their escape. On exploring the bowel, the anus will be found larger than is normal, and the muscles contracting continually from the patient's sense of a weakness in them; and at the same time the muscles are thin, weak, and narrow, instead of broad, firm, and powerful. In such a case, Mr. Allingham recommends that, when the fistula is cured and the wound well healed, the everted and separated ends of the muscles may be freed and the sulcus lessened in depth by cutting deeply across the old scar and allowing the wound to heal from the bottom.

In another case, instead of there being one deep sulcus, the sphincter may have been divided in two places, and thus a weak splicing have ensued. This generally occurs, he says, when the muscles have been divided obliquely, instead of at right angles to their fibres. In this case, a loss of tone may be observed, and a consequent incontinence of feces. The longer an operation is deferred in such a case, the greater will be the paralysis of the part. An examination reveals two cicatrices: one on each side of the bowel, or perhaps two on the same side. There is then the same loss of power and lack of consistence of the muscles as in the first case, with this difference, however, that there are two weak points in the circumference of contractility. In fact, the muscles have been divided up into small segments, and the sphincters, as a whole, have been proportionately weakened.

Mr. Allingham's treatment for this condition is to burn deeply into both sphincters in several places with a Pacquelin cautery, and also to cauterize the old scars deeply. The resulting cicatrix will, he says, usually contract sufficiently to give the patient control over the bowel; and, if it does not, the operation must be repeated.

Another condition which the author describes is one brought about through the decussation of the fibres of the vaginal and rectal sphincters in women, which leaves a weak point at their junction in the perineum. If the anal sphincter should be divided at this point, incontinence of feces may result. There may be little evidence of anything wrong externally, and the finger itself may discover nothing except that from the location of the scar the fistula must have been perineal, and in some cases the anus may be seen to be drawn too far backward. For this condition, Mr. Allingham says Lawson Tait's operation on the perineum may be done; but he advises that the flaps should be turned into the rectum and sutured together, thus narrowing the anus. He prefers, however, to burn the sphincters deeply in the manner just described in speaking of the treatment of the second condition. In other words, the treatment advised for the distressing weakness in the second and third conditions is, briefly, to burn the affected parts in such a way as to produce a deep cicatrix and to utilize its well-known tendency to contract, in order to overcome the relaxation of the parts, which is the immediate occasion of the incontinence.

The treatment is not new, but is so easily performed that it deserves to be borne in mind as a method which has brought relief to many miserable patients.

TREATMENT OF EXTRA-UTERINE PREGNANCY.

Since 1869, when Dr. J. G. Allen, of Philadelphia, succeeded in arresting an extra-uterine pregnancy by the use of the Faradic current, electricity has been about the only agent used in this country in treating that condition. But the Faradic and the galvanic currents have been employed with the dosage regulated by the sensations of the patient. But one fatal result—in a case under the care of Dr. Janvrin—has followed the use of electricity, and that could not be attributed to the treatment. In no case has serious disturbance been set up by the retained fœtus or membranes. The Faradic current has been most commonly employed, one pole being applied within the vagina or rectum, and the other over the inguinal region. Rockwell and others employ the interrupted galvanic current. Prior to 1887, American operators, almost as a unit, favored this method, till the end of the fourth month of pregnancy. Garrigues sets no limit. In a few cases of interstitial pregnancy, the ovum has passed into the uterine cavity, and abortion resulted, after the use of the electric current.

Electricity has secured but few adherents abroad. Influenced by the favorable results in abdominal surgery, by the fact that the great majority of cases are tubal, and by *post-mortem* demonstrations of the feasibility of exsection, J. Veit, Martin, Tait, and others have done abdominal section, and removed the tube and contents. Many of the operations were done after rupture of the cyst, and were made for the arrest of hemorrhage. The results have been most excellent—of Tait's thirty-five cases, but two have died. There can be no question but that abdominal section should be done for the arrest of hemorrhage where rupture has occurred—at this early period, it is usually best accomplished by exsection of the cyst—for, otherwise, death is almost inevitable. Foreign authorities in general recommend, in the early months, removal so soon as a diagnosis is made. Mr. Tait, in particular, urges against electrical treatment that it leaves a foreign body in the abdominal cavity to undergo suppuration; also, that while it kills the fœtus, the placenta will continue to grow. It need only be said that thus far neither of these possibilities has occurred. Within the past year, however, there has been a reaction in this country, against the use of electricity, and a number of surgeons have successfully removed extra-uterine cysts.

If the pregnancy passes the fourth month, it is almost certainly intraligamentous, abdominal, or ovarian, and will probably go to term, when false labor will occur, followed by the death of the fœtus. The question of treatment is by no means so definitely settled after the fourth month, as before that time. Of seventeen cases collected by Litzmann and Werth, in which abdominal section was done during the life of the fœtus, only two mothers were saved. All the infants were living, but nine lived only from one to fifty hours. Litzmann gives partial approval to operation during fœtal life. He would operate at the tenth month, if the child were strong and well-developed. Werth advises against operation till after the death of the fœtus. Gussemo advises operation at the eighth month. Bandl would operate about full term, before false labor begins. Martin and Breisky have removed the fœtal sac entire with living children. The table of Dr. Harris shows that, judging from the experience of the past, the operator has but one chance in nine of saving the life of the mother, and one in two of saving that of the child, when the operation is performed during fœtal life. While it is the opinion of the majority that operation should be postponed till after fœtal death, a growing minority favor the attempt to save both mother and child. The question of laparotomy or elytrotomy is likewise unsettled. Thomas favors incision from the vagina if the tumor is low down in the pelvis. Abdominal section is usually preferred. When the pregnancy is intraligamentous, the peritoneal cavity should not be opened. This operation would not be laparotomy. The placenta should not be removed unless the entire sac can be exsected, as is done by Martin and Breisky.

After the death of the fœtus, the treatment should be expectant. Litzmann and Werth have proved the danger of operation to be as great after the death of the fœtus as before, unless time is allowed for the placental circulation to cease. Litzmann places this time at five or six months after fœtal death, while Werth would operate in ten or twelve weeks. After the cessation of the placental circulation, the entire sac has been removed by Litzmann, Billroth, Thornton, and Schröder. Schröder has seen a smart hemorrhage from the placental site, nine weeks after fœtal death. Operation may be called for at any time by rupture of the sac, suppuration, or peritonitis. In a few cases, the fœtus has been changed into a lithopædion. Unless the entire sac can be removed, the placenta should be left. Operation should be conducted upon the lines of modern abdominal surgery.

When cases are seen after suppuration has occurred, and the fœtal parts are being discharged by the abdominal wall, vagina, bladder, or intestine, nature should be assisted by enlarging the openings and removing presenting fœtal tissue. Operation will sometimes be necessary where the natural openings are in the bladder or intestine. Local antisepsis should of course be employed.

IODOFORM IN HÆMOPTYSIS.

We wish to call the attention of our readers to the claim made by two French physicians, Chauvin and Jorisenne, that iodoform is an efficient and prompt remedy for hemorrhage from the lungs. Its action is not confined to a temporary stanching of the bleeding, but usually checks the tendency to the recurrence of it which is so common, and when this does take place it is not nearly so grave as the first hemorrhage. One of the advantages of the use of iodoform in hæmoptysis lies in the fact that it is active in very small doses. The average dose used by MM. Chauvin and Jorisenne was about three-quarters of a grain. It was given in pill form, made up with extract of gentian or of licorice, and from three to five doses were given daily. It is said that the patients treated in this way were delighted with the method, and

MM. Chauvin and Jorisenne speak of it in the most enthusiastic way.

Anyone who has had much experience in the treatment of hæmoptysis knows that it often ceases spontaneously, and that it is not always safe to conclude, when remedies have been used, that art has accomplished what nature so often does without assistance. But it is not to be supposed that the physicians who praise iodoform so highly are ignorant of this fact, or have failed to take it into consideration. So, it seems quite worth while that the use of iodoform should be given a fair trial, especially as this drug is often of great value in the treatment of the condition in which hæmoptysis most commonly occurs.

Book Reviews.

[Any book reviewed in these columns may be obtained, upon receipt of price, from the office of the Reporter.]

THE SURGICAL DISEASES OF THE GENITO-URINARY ORGANS, INCLUDING SYPHILIS. By E. L. Keyes, A.M., M.D., Professor of Genito-Urinary Surgery, Syphilography, and Dermatology in Bellevue Hospital Medical College, etc. 8vo, pp. xvi, 704. New York: D. Appleton & Co., 1888.

Dr. Keyes is well known as a teacher and practitioner in the department of surgery to which this book is devoted, and it bears the marks of his experience and study. At first sight, it seems almost sacrilegious that he should have swept from the title-page the name of Van Buren, which did so much to bring into favor the volume of which we are told this is a revision; but Dr. Keyes justifies his act by stating in his preface that he, and not the late Dr. Van Buren, wrote that book, except four chapters of it; so it is not sacrilege, but it is a pity, we think.

There are other points about this book which invite criticism, and chiefly of a sort which is in keeping with the change in its title and the claim to authorship of its predecessor. Its scientific qualities are very fair, and certainly far superior to its forerunner. It presents a view of almost every subject covered by its title. This view is usually terse and dogmatic; so much so that some things which deserve mention are omitted and some errors have crept in; but in the main it is a safe guide and may be commended to the notice of our readers.

MEDICAL PUBLICATIONS. HARVARD MEDICAL SCHOOL. 1887. 8vo.

This book contains ten papers by men connected with Harvard, which have already appeared in various medical journals. It is intended to show the character of the original work done by instructors in this school or under their personal supervision during last year. It does not include all the original work of these men, but presumably contains what the compiler, Dr. J. Collins Warren, thought the best. We have not space in which to catalogue these papers, but we may say they are all of a very high degree of merit. One of the most interesting is that of Dr. Harold C. Ernst, called "An Experimental Research on Rabies." It was originally read before the Academy of Surgery of Philadelphia, and contains an admirable account of his experiments with material derived from two rabbits inoculated by Pasteur or in his laboratory and used for inoculation upon other rabbits in the manner of Pasteur. The description of Dr. Ernst's experiences is given in a manner which might well be taken as a model by Pasteur, and leaves no room for doubt that the effect of the inoculations furnishes very strong evidence in favor of the theory that the material used is what is called "specific." That it is the very virus of rabies, or hydrophobia, we do not believe; but this is not the place in which to argue the case. We can, and do, heartily commend the temperate scientific tone of Dr. Ernst's argument, and believe that he would do good service to the cause of science if he would continue his investigations and report their results from time to time.

Complicated Case of Occlusion of the Vagina.

Another instance of the rare cases in which a woman in labor is found to have complete occlusion of the vagina has been recorded by Dr. W. Zinsstag, of the Basle Gynecological Clinic. The patient, a young primipara, being in labor, on being examined by her family doctor, was found to have an occluded vagina. He, thinking this arose from sterrosis, sent her to the clinic. When first examined there, the finger felt a narrow canal, at the end of which a sharp-edged circular fold separated it from a somewhat more extensive cavity; behind this latter cavity the fœtal head was felt through the thick septum. On inspection it was discovered that the canal was not the vagina, but a dilated urethra, and the sharp-edged fold the sphincter of the bladder; the cavity was the bladder, and the membrane separating the finger from the fœtal head the posterior vesical wall. From the orifice of the urethra to the fourchette there stretched a strong bluish membrane, across which several veins ran. No opening capable of admitting the finest probe could be found. A somewhat similar case of persistence of the sinus urogenitalis is described by C. von Braun in his text-book. Coition must have taken place through the urethra, and some opening in the hymen must have existed, permitting the escape of the menses, which had been normal, and also allowing of the introduction of the seminal fluid. This orifice must have become closed up during pregnancy. Incisions were made in the hymen and in the perineum, and the labor was satisfactorily concluded.—*Lancet*, May 12, 1888.

CORRESPONDENCE.

The University Fire.

TO THE EDITOR.

Sir: We wish to make some acknowledgment to the resident physicians of the University and Philadelphia Hospitals, to students, and others who so energetically aided us in saving preparations, books, and apparatus at the recent fire in Medical Hall, but scarcely know how to reach them except through the columns of the medical press.

Will you permit the use of so much of your columns as will enable the Medical Faculty to heartily thank these gentlemen for their services? Very truly yours,

JAMES TYSON, M.D., Sec'y.

University of Pennsylvania,
Department of Medicine,
June 19, 1888.

Queer Remedies.

TO THE EDITOR.

Sir: We have a man here that styles himself Dr. I. T. Hazel, who recommends the following remedy for epilepsy:

Take the false tongue of a new-born calf, which he says grows under the real tongue during intra-uterine life; dry thoroughly and powder, and give from five to ten grains three times a day.

This prescription ought to go with the Chinese remedy for typhoid fever, which is as follows:

℞.—Two fresh tom-cat heads,
One fried snake-skin,
Three inches dried umbilical cord,
One gallon water.

Macerate three days and give a tablespoonful every four hours.

Yours truly, J. T. SMITH, M.D.

Harrodsburg, Ind.,
June 13, 1888.

Quinine Rash.

TO THE EDITOR.

Sir: I send you an account of a case occurring in my practice, in which there was a very marked idiosyncrasy in regard to quinine. The patient was a young woman, eighteen years old, to whom I was called because she had a severe supra-orbital neuralgia. I prescribed quinine, to be given in five-grain doses every two hours until she had taken four doses. My patient told me she could not take quinine, but I thought I would risk it. The result was that after she had taken two doses her skin turned a bright scarlet, her eyes became congested, and she complained of an intense itching and burning, with extreme nausea and vomiting. Her temperature rose to 103°. By the next day, all the symptoms had disappeared. I have read of such cases, but this is the first time I have seen one in my practice, which is in a malarial country, at that.

Yours truly, B. D. TALBOTT, M. D.

Birdville, Texas,
June 15, 1888.

The Attire of Women.

TO THE EDITOR.

Sir: The Israelitish women, after they had left Egypt, were forbidden to wear men's clothes. The style is not mentioned.

Yours truly, EDW. VANDERPOEL.

New York, June 15, 1888.

NOTES AND COMMENTS.

American Rhinological Association.

The American Rhinological Association will hold its sixth annual meeting at Cincinnati, Ohio, September 12, 13, and 14, 1888.

Communications in regard to this meeting may be addressed to

DR. JOHN NORTH, Secretary,
Keokuk, Iowa.

Epidemic of Typhoid Fever.

At the meeting of the Society of Public Medicine and Professional Hygiene of Paris, March 28, 1888, M. Napias (*Bulletin Médical*, April 22, 1888), spoke of an epidemic of typhoid fever which had broken out in an institution for blind children in Paris. It seems from his statement that the disease had been in the neighborhood for some time, but the first case developed in the institution November 12, 1887. There were fourteen cases altogether, and two deaths, a mortality of 14.3 per cent. Thinking that the cause of the epidemic should be sought in the water-supply, he had this changed by December 20. The last case of typhoid appeared January 6, 1888, eighteen days after the change of water-supply.

The checking of the epidemic by the change of water-supply is the chief point of interest in this report of M. Napias. It gives force to the advice which cannot be too often repeated: In any epidemic of typhoid fever in which the source of contagion is not obvious, examine most carefully into the character and source of the milk and of the water supply.

Laceration of the Vulva after Child-Birth.

At the meeting of the Society of Practical Medicine of Paris, April 12, 1888, M. Auvard reported the following statistics bearing upon the condition of the vulva following child-birth, and based upon the examination of one hundred cases observed by him at the Charity Hospital:

The vulva was intact in five per cent.; the perineum was more or less torn, with integrity of the rest of the vulva, in fifteen per cent.; lateral or upper portions of the vulva were torn, with integrity of the perineum, in thirty per cent.; vulva and perineum were injured in fifty per cent. In view of the great frequency of injuries of the vulva, and the consequent danger of the penetration of germs into the system, Auvard advises careful antisepsis.—*Bulletin Médical*, April 15, 1888.

Guaiacol in Tuberculosis of the Lungs.

The use of guaiacol in phthisis has been spoken of in the REPORTER a number of times. We learn from the *Wiener med. Presse*, May 13, 1888, that Dr. Horner has recently stated in the *Prager med. Wochenschrift*, No. 17, 1888, that he is much pleased with the results obtained by him in its use during four years. The patients took it willingly, and after the first few weeks their appetite markedly increased, the cough and the quantity of the sputum simultaneously diminished, sleep was undisturbed, the strength and body-weight increased, and the night-sweats diminished or wholly disappeared. With these general signs of improvement in the disease, there was also a decrease in the fever. When guaiacol had been continued longer, the râles disappeared more and more, while percussion no longer revealed the exact borders of the affected lung; moreover, the number of tubercle bacilli became fewer or wholly disappeared, the drug having such a decided influence upon these excitors of the disease, that a patient with beginning tuberculosis of the apices may become entirely cured after several weeks' treatment. Horner orders the guaiacol in pills containing about one grain each. He begins with three a day, increases this after three days to six, and again after three days to ten, and directs them to be taken immediately after breakfast, dinner, and supper. In addition, the patients are well cared for and nourished and placed in pretty good hygienic conditions.

Experimental Nephrectomy.

At a recent meeting of the Anatomical Society of Paris, M. Tuffier stated that he had undertaken some experiments to determine the minimum quantity of kidney substance which is necessary to life. After a total right nephrectomy, he had performed two partial left nephrectomies upon a dog, from which he at once recovered. The resected kidney quickly cicatrized, and the loss of substance has in great part been filled in by epiploic adhesions.—*Bulletin Médical*, May 2, 1888.

Peculiar Case of Dermatitis Due to Antipyrine.

In the *Therapeutische Monatshefte*, No. 9, 1888, B. Spitz reports the case of a young man who had taken one hundred and thirty-five grains of antipyrine within one week during an attack of typhoid fever. As the seeming result of the drug, there suddenly developed over his whole body an eruption which at first was like that of measles and subsequently more like that of scarlet fever. On the face there were elevations resembling urticaria; the eyelids and lips were swollen and very œdematous. After a bath, which was taken on the fourth day to hasten the desquamation which was already beginning in the form of large leaves, the epidermis over the whole body separated in large shreds, a moist surface remaining. Here and there were blisters containing serum, and larger than a dollar. These burst on the gentlest touch; but in other places it was sufficient to stroke the skin gently with a finger to loosen the whole membrane. Recovery occurred slowly under the use of a powder which was dusted on.—*Centralblatt f. d. med. Wissenschaften*, May 12, 1888.

Transplantation of the Cornea.

Dr. J. J. Chisolm has performed Von Hippel's operation of transferring a piece of rabbit's cornea to a man's cornea at the Presbyterian Eye, Ear, and Throat Charity Hospital, Baltimore. The patient had been blind for many years. A piece of the blind eye was cut out with a trephine driven by clock-work. With the same instrument, a duplicate piece was taken from the sound eye of a living rabbit and fitted accurately into the hole made in the man's cornea. The operation was made painless by the use of cocaine. This operation, it will be remembered, has been already referred to several times in the REPORTER.

Honoring Dr. Corson.

In honor of his sixtieth year of practice, Dr. Hiram Corson, of Conshohocken, was tendered a reception in the Bellevue Hotel, Philadelphia, June 6, 1888. The doctor is in his eighty-fourth year, and is the oldest living graduate in medicine of the University of Pennsylvania.

Effects of Exposure of the Intestines.

At the November meeting of the Berlin Obstetrical and Gynecological Society, Professor Olshausen read a communication on a hitherto unrecognized cause of death after laparotomy at which intestine has been allowed to lie outside the abdominal wall for a prolonged period. In this country, says the *British Medical Journal*, May 19, 1888, surgeons are careful to prevent prolapse of the intestines. Coils which adhere to a tumor and cannot be at once separated are carefully covered with flat sponges or with towels wrung out of hot water, which often contains an antiseptic compound. As soon as the adherent coils are separated from the tumor, all bleeding points being secured, they are carefully replaced. As soon as the tumor is extracted through the abdominal wound, or indeed whilst it is slipping out of the incision, a broad flat sponge is slipped into the peritoneal cavity to prevent any chance of prolapse and to protect the gut from the suture-needles. The abdominal incision is, moreover, always made as short as possible, so as to avoid the sudden escape of coils of intestine. The Germans are less particular about eventration. Dr. Martin, in 1885, publicly recommended the dragging-out of a large amount of intestine in cases in which the tumor lay deep in the abdominal cavity, and declared that the greater part of the intestinal tract might be left hanging out of the abdomen during the whole operation, so that the surgeon might have plenty of room for manipulating the tumor. "This eventration," said Dr. Martin, "is quite free from danger; I have practiced it in at least ninety per cent. of my cases without seeing any evil results." Professor Olshausen was more cautious, and directed attention to certain cases of collapse, often fatal, which followed cases of abdominal section and were not accompanied with symptoms of peritonitis. He concluded that prolonged exposure of the intestines in laparotomy might cause disturbance in the circulation in the walls of the gut, ending in venous stasis and serous infiltration, with ultimate formation of ecchymoses. At the same time, the muscular coat is paralyzed, often for several days; if the paralysis does not abate, symptoms of ileus set in. Fatal results of this kind are probably caused by the absorption of decomposing material in the intestinal canal.

Another objection to exposing the intestines is that it results in great loss of heat. Special stress is laid upon this point by Prof. Ashhurst (see REPORTER, April 7, 1888), who, it will be remembered, attributed much of his success in many serious operations to his care in preserving the body-heat.

Hyoscine.

Budde's results obtained in the Friedrichshain Hospital under the direction of Fürbringer, are in essential agreement with those of Erb. He found that hyoscine was more active than hyoscyamine, and employed the iodate of hyoscine hypodermically in solutions of one part in one thousand of water. The initial dose for adults was 2-10 milligram (1-325 grain); for children, 1-10 milligram (1-650 grain). His results are as follows (*Deutsche med. Wochenschrift*, May 17, 1888): The drug has no direct effect in controlling muscle-spasm, the movements of chorea minor and athetosis, nor does it exert any direct influence upon whooping-cough; its hypnotic action in cases of tabes is but slight. Partly successful results were obtained in the night-sweats of phthisical patients and in lead-colic; its action upon the perspiration and salivary secretion is as variable as that of atropine. Its effect is most prompt in the trembling of paralysis agitans, and in senile and alcoholic tremor. In these cases, hyoscine also acts favorably upon the sleep of the patients, often in cases in which other hypnotics have either entirely failed or are only partly successful. Its effect upon trembling is not, however, lasting. An important effect produced by it is fatigue, which is always observed; other secondary effects are scintillations before the eyes, dizziness, dryness in the mouth and throat, thirst, dilatation of the pupil, and delirium. In one adult, disagreeable secondary symptoms were noticed after 1-325 grain, while in some children this dose was borne without producing these symptoms. The largest dose given to an adult was 1-93 grain, and it produced serious secondary symptoms. If hyoscine is given for a long time, the patient becomes accustomed to it, and the dose has to be increased to bring about the same effect.

Treatment of Furuncles in the External Ear.

In a communication to the *Berliner med. Wochenschrift*, April 30, 1888, Grosch praises the effect of acetate of aluminium, freely diluted with water, in the treatment of furuncles in the auditory canal. He fills the canal full of the solution and then closes it with cotton. If the furuncles have already gone to the point of fluctuation, they are first evacuated by an incision. The result has been highly successful, even when both canals have been affected with diffuse furunculosis. In at most four hours after the application has been made, the pain became bearable; after perhaps eight hours, it had pretty nearly completely disappeared. After a few days—from two to six—complete recovery occurred in all the cases. No new furuncles, nor any granulation formation, occurred. Furuncles which were still quite firm disappeared without going on to suppuration; those in which pus had begun to form healed through inspissation of the pus and reabsorption. The use of the remedy in such strength as was employed occasioned no injury—at most, occasional temporary itching.—*Wiener med. Presse*, May 13, 1888.

Dangers of Antiseptics.

At the last meeting of the Berlin Medical Society, says the *British Med. Journal*, May 19, 1888, Dr. Emil Senger read a paper on the influence of antiseptic remedies on the organs of the body, with special reference to operations on the kidney. It is well known that after nephrectomy, or even nephrotomy, many patients die with symptoms of uræmia or anuria, even when it had been ascertained beforehand by careful examination that the other kidney was quite healthy and capable of secreting the necessary amount of urea. Dr. James Israël, chief surgeon of the Berlin Jewish Hospital, has propounded a very complicated theory as to certain nervous sympathies between the two kidneys, whereby an operation on one may give rise to degeneration of the other. Senger has now proved by experiments on rabbits and dogs that our antiseptic remedies are the cause of these complications. He injected into the animals, when in perfect health, one tenth or twelfth part of the quantity of corrosive sublimate, carbolic acid, etc., which is sufficient to kill them. He then extirpated one kidney, and examined it microscopically, with the result that in all cases he found glomerulo-nephritis. There was exudation between the glomerulus and the capsule, and the epithelium of the tubuli contorti was almost entirely destroyed. He found also fatty degeneration of the liver, the spleen, the heart-muscle, etc. The various antiseptic agents were found to be injurious in different degrees, corrosive sublimate being the most dangerous, then the others in the following order: iodoform, carbolic acid, salicylic acid, boric acid. Senger therefore recommends surgeons to avoid antiseptics in operations on the thorax and abdomen, and urges them either to employ sterilized water or a solution of salt. By bacteriological and pathological researches he proved, first, that this kills the streptococcus pyogenes aureus in twenty-eight minutes, and that the effect is independent of the degree of concentration, for a five per cent. solution is just as effectual as a twenty per cent. Secondly, he claims to have shown that chloride of sodium does not in any way injure the organs, and that no dose is strong enough to kill any animal.

Aneurism of the Femoral Artery.

At a recent meeting of the Surgical Society of Paris, M. Bucquoy related a case of aneurism of the femoral artery treated according to the method recommended by Baccelli. A woman about forty years old came to the hospital with a tumor seated at the origin of the femoral artery, which, by examination, was found to be an aneurism. The heart showing symptoms of valvular disease, M. Bucquoy hesitated to tie the external iliac artery, and in this disposition he was encouraged by one of his colleagues. Electro-puncture was resolved on, but the pain was so great that this method had to be abandoned after two trials. He sought then to obtain coagulation of the blood by the introduction of a foreign body, and with this view he introduced the spring of a watch, as advised by Baccelli. The spring went in without difficulty, but, instead of curling up, it went through the opposite wall; being slightly withdrawn, a portion was cut off, leaving about an inch and a half in the sac. During the following days the pain diminished, and the tumor became much firmer. Two months afterward, the patient, having fallen into a cachectic state, died. When the tumor was opened, the spring was found broken and covered with fibrin, but the clots were of recent formation. However, M. Bucquoy thought that, on the whole, the patient was benefited by the treatment, and that it might be repeated in a similar case.—*Medical Press and Circular*, May 16, 1888.

Treatment of Ingrowing Nail.

A very simple treatment of ingrowing nail is proposed by Patin in the *Gazette des Hôpitaux*. After cleansing and disinfecting the affected nail, the parts between the nail and the granulations are painted with a solution of traumaticin, which consists of one part gutta-percha to eight of chloroform; this painting is done at first a number of times a day, but later less frequently. The foot is protected somewhat, and by degrees the nail lifts itself from the tissue in which it was imbedded; it may then be removed without pain with scissors. Traumaticin acts as an anæsthetic by virtue of the chloroform, and mechanically through the gutta-percha, which insinuates itself between the nail and the granulations, and so frees the former from the ingrowing tissue.—*Wiener med. Presse*, May 6, 1888.

Bad Prescribing and Still Worse Dispensing.

The *Ephemeris*, June, 1888, says: The writer was recently summoned as a witness in a New York Court, and heard the following case: A physician gave a patient, for colic, one-third of a grain of sulphate of morphine by hypodermic solution in the walls of the abdomen, and gave him a prescription for "Mistura Squibb ʒ ss," to be taken as directed. The verbal directions given with this were that if, on reaching home, the man's pain was better, he should take none; if about the same, take a teaspoonful; if worse, take two teaspoonfuls. In a few minutes after the man left it, the pharmacist came to the physician's office to ask what "Mistura Squibb" was, or what was meant by it. The physician gave him the formula for the common compound tincture of opium, or diarrhœa mixture. He knew what that was, and went off to dispense it. A short time after, he came to the physician again, and said he had made a great mistake by having dispensed the compound solution of opium, a preparation six times stronger than that intended, and containing a proportion of opium equivalent to about 7½ grains of sulphate of morphine to the fluidounce.

They at once sent for the patient to come to the pharmacist's store, when they found he had taken two teaspoonfuls of the compound solution of opium, about equivalent to two grains of sulphate of morphine, after having had one-third of a grain by hypodermic injection. The gravity of the case was at once realized, and very vigorous proper measures were adopted to counteract the opium; and, after two physicians walking and dragging the patient through the streets all night, with occasional bowls of strong coffee—keeping near to a large hospital where a battery was in readiness in case the respiration should entirely fail—signs of improvement began. Then in a few hours more the danger was past.

It seems altogether inexcusable for any physician to write such a line as that above quoted and issue it as a prescription, because it really indicates nothing, and means nothing that any pharmacist is bound to know, or can in any way be responsible for not knowing. If physicians by thoughtless habits abbreviate and curtail their names so that they signify nothing with definiteness or safety, and will use names of persons instead of things, or proper names as indefinite adjectives, they not only discredit themselves, but also their profession, and when they get into the Courts they can expect no mercy.

The pharmacist in this case did exactly what was right, and took the only proper course open to him, when he went to the physician with his nondescript prescription for an explanation, and the physician then did the best he could do by giving him the formula for it. But, after this, the pharmacist went back and committed the almost criminal blunder of dispensing a solution instead of a tincture, the one six times stronger than the other—with the formula for the weaker one in his hand, and the label of the stronger one on his bottle—with a nearly fatal result.

Lanolin in Cuts and Burns.

A recent article in the *Pharmaceutische Rundschau*, March, 1888, states that experience has shown that lanolin is an excellent dressing for cuts and burns. Professor B. Fränkel finds that it prevents the formation of scabs, and that burns under this treatment do not desquamate so much as under most others. In cases in which it is desired to irrigate a wound, in order to reduce heat and irritation, lanolin may still be applied, as it is not readily washed away. If a small wound is immediately dressed with this ointment basis, hemorrhage is stopped.—*British Med. Journal*, May 19, 1888.

—It is announced that the Queen has given $350,000—the balance of the Women's Jubilee offering—to St. Catherine's Training Hospital for Nurses for the London poor.

Lung-Cavity injected with Carbolized Iodine.

Dr. E. Peyre Porcher, in reporting a series of cases in the *New Orleans Med. and Surg. Journal*, June, 1888, gives the following particulars of a case in which he injected carbolized iodine into a lung-cavity. This case was interesting, he says, as it at least demonstrated that very slight disturbance, either local or general, may result from such a procedure. M. White, colored, thirty-five years old, was admitted July 10, suffering with a phthisical abscess in the left lung, associated with cough, purulent expectoration, night-sweats, and other symptoms of well-marked pulmonary disease. The cavity was single and so extensive and well-defined as to render it extremely suitable for injection. The formula recommended by Dr. Blake White of New York was employed, which is as follows:

℞	Atropia	gr. ⅓
	Morphia sulphate	gr. iv
	Tinct. iodine	f℥ iii
	Acid. carbolic (pure)	gtt. xx
	Glycerine	f℥ ss
	Dilute alcohol, 20 to 30 per cent. .	f℥ ss

M. Sig.—15 to 30 minims.

His needle attached to a hypodermic syringe filled with the fluid was used. The fluid was injected into the left lung at a point about two inches below the clavicle, and the same distance from the left border of the sternum. When the point of the needle passed in and touched the posterior wall of the cavity, the resistance was easily felt, and he could be certain of the success of the operation.

With the exception of some cough, there was so little irritation, pain, or uneasiness produced, that the patient was not deterred from going almost immediately to a meal. Nearly every disagreeable symptom was relieved and the cough greatly diminished. The operation was repeated after six weeks, but did not arrest the final advance of the disease, though the patient survived several months.

A similar case, Dr. Porcher says, is reported in a previous series of cases.

Meco-Narceine.

In the group of substances obtained from opium is found one, which, without possessing the toxic properties of the other opium preparations, exhibits pronounced narcotic action. This substance is narceine. But its use is rendered difficult by the fact that it is difficult to make, and when made is insoluble in water. Laborde now offers a preparation of opium which is free from morphine, and consists of narceine to which some unknown alkaloid clings. This preparation, which Laborde calls meco-narceine, possesses pronounced narcotic power, without acting as a poison. When one or two centigrams (grain one-sixth to one-third) are injected into a dog weighing ten or twelve kilograms, the animal falls into a quiet, deep sleep, from which it wakes fresh and cheerful—unlike the after-effect produced by morphine. Meco-narceine produces a diminution of the general sensibility, which is not observed after the use of pure narceine. When meco-narceine is freed from the unknown alkaloid which clings to it, chemically pure narceine is obtained, which is insoluble and does not possess the good properties of meco-narceine. The slowing of the respiration and circulation produced by meco-narceine, as well as the fall in arterial blood-pressure and in temperature, shows that a certain degree of anæmia of the nerve-centres is the cause of the effects produced. Laborde employed meco-narceine in the form of pills containing one-twelfth to one-sixth of a grain, by hypodermic injection (one-twelfth of a grain to about fifteen minims), and in the form of a syrup in the proportion of one-sixth of a grain to three-fourths of a fluidounce. He regards the chief indications for the use of the drug as sleeplessness, bronchial affections in which cough and secretion form the chief symptoms, neuralgia, and as a substitute for morphine in morphine-takers. The dose may be increased without harm up to one-third, one-half, and even two-thirds, of a grain a day.—*Wiener med. Presse*, May 27, 1888.

A Bullet which had passed through the Abdominal Wall discharged per Anum.

Dr. J. O. Stewart, of Cedarville, O., reports the following case in the *Medical Record*, June 2, 1888: Laura B——, sixteen years old, colored, was shot August 2, 1887. The ball, which weighed sixty-eight grains, penetrated the abdomen to the right and a little above the umbilicus. The opening made by the ball was round, and was not probed beyond a depth of one inch. The wound was washed with water containing carbolic acid, and absorbent cotton with adhesive plaster applied. The patient rallied well from the shock. The treatment was directed toward absolute rest. The bowels moved eighteen days after the accident. Urine, during this time, was dark and con-

tained a substance like coffee-grounds. The patient vomited occasionally during the whole time of her confinement to bed, which was about three months, and at times the vomited matter contained a little blood. Her temperature frequently was as high as 105°, and was kept down by antifebrine administered freely, in doses of about five grains every three to five hours. The ball was passed per anum on the thirty-sixth day. It was considerably altered in shape, and was indented in several places.

The Treatment of Acne.

Dr. P. G. Unna, in the *Monatshefte für praktische Dermatologie*, writes: "As every ordinary suppuration must be regarded as due to the invasion of pus microbes, so the clinical picture of acne divides itself into two essentially distinct sections. These are, the process of follicular obstruction and of the formation of comedones, and the process of suppuration in the follicle. Comedones are often erroneously separated from acne; their sole cause is the abnormally firm coherence of the horny layer on portions of the skin provided with lanugo hairs. Whether this change in the horny layer is due to a partial anæmia of the skin, or to the presence of special organisms, is not known. The second part of the process, the suppuration of the follicle, takes place only in those plugged glands within which pus microbes have entered before their closure, and which have been subjected subsequently to irritation (mechanical, eczematous, or from tar, chrysarobin, iodine, or bromine), which has facilitated the intrusion of the pus microbes into the follicular walls. Thus the treatment of acne has to fulfill two chief indications—to loosen the corneous layer and to destroy the microbes. The horny layer can be best removed slowly by means of sulphur and resorcin, while the hyperæmia associated with all efforts at reducing cornification is lessened by the application of oxide of zinc. Resorcin has this advantage over sulphur, that corrosive sublimate, the best agent for destroying micro-organisms, can be combined with it; carbolic acid, on the other hand, goes best with sulphur. Twice or thrice a week the whole surface should be gently scraped, the pustules punctured, and the comedones pressed out. The effect of treatment should be observed at frequent intervals. Every acne patient must wash with soap, and employ water as hot as he can bear, in order to soften the horny layer. Hebra's spirit of soap, marble soap, or sublimate of mercury soap, are still better than common soap. Sensitive persons may dust with oxide of zinc and starch after washing, since this does not occasion any blocking of the follicles. Pastes suit for application at night best, while lotions and spirituous applications can be used in the daytime to maintain their effect." As examples of suitable prescriptions, the following are given:

Sulphur paste at night and resorcin spirit during the day.

℞ Ung. zinci benzoati, ... ℥iii
Sulphuris precipitati, ... ℥iiss
Terræ siliceæ, ... ℥i
[*vel* kaolini], ... ℥ii¼
M. f. optime terendo pasta.

℞ Resorcini, ... ℥ss-℥i¼
Glycerini, ... ℥ss
Aq. flor. aurant, ... ℥v
Spiritûs, ... ℥iiss
M. Signa. The lotion.

Together with this either spirit of soap, or over-fatty marble soap, to wash with.

Resorcin paste at night and corrosive spirit during the day.

℞ Ung. zinci benzoati, ... ℥iiss
Resorcini purissimi, ... ℥iiss
Terræ siliceæ, ... ℥iiss
[*vel* kaolini], ... ℥v
M. f. optime terendo pasta.

℞ Hydrarg. bichloridi, ... gr. ⅝–⅓
Glycerini, ... ℥ss
Aq. flor. aurant., ... ℥v
Spiritûs, ... ℥iiss
M. Signa. The lotion.

Together with these either spirit of soap, or over-fatty sublimate soap, to wash with.

When the disease has been removed by the treatment indicated, resort must be had to procedures calculated to obviate recurrences. To this end, the continuous employment of a weak resorcin paste, or of a spirit containing 2 per cent. of resorcin and 1 per 1000 of corrosive sublimate, or the regular use of sublimate soap, or of marble soap for the face, will be found beneficial. In addition, as in every parasitic affection of the face, any pityriasis capitis must be cured, since in it there is a lurking-place of those germs which are liable to grow in the skin. This simple prophylaxis will prevent many recurrences. Arsenic and ichthyol internally act favorably on the parakeratosis, while keratinized pills, containing one-seventh of a grain of sulphide of calcium, promote suppuration in the follicle.—*Edinburgh Med. Journal*, May, 1888.

—Dr. F. Loeffler, staff-surgeon and *privat docent* in the University of Berlin, has been appointed to the Professorship of Hygiene in the University of Greifswald.

Death from Ether in Hamburg.

Dr. A. C. Bernays, in a letter from Hamburg to the *St. Louis Med. and Surg. Journal*, June, 1888, says: "Kümmel is not *the* great surgeon here, but, with all that, he is a man of considerable and deserved reputation. The greatest man here is Schede, and I have spent most of my time in his hospital. Dr. Sands, of New York, spent a month with Schede, and, being a partisan of ether as against chloroform, he undertook to convert Schede by showing him how to use the former anæsthetic. The case was that of a woman of about thirty-eight, afflicted with uterine cancer. Sands, who as you know is recognized as one of our best American surgeons, sent to London and got an ether-bag and the apparatus necessary for the administration of the anæsthetic, and also secured an article of the very purest and best in the way of ether. He and his son, Dr. Sands, Jr., began the administration in the presence of Schede and eight other prominent surgeons. In less than four minutes, the patient was dead—so very dead that all means at revivification—artificial respiration, even tracheotomy and forced air, were of no avail. The post-mortem showed normal heart, lungs, and brain—in short, nothing abnormal or pathological but the cancer of the uterus.

"The French and Germans, as you know, have never taken kindly to ether, using it but very little, and, if this incident will keep them from using it at all in the future, they are to be congratulated. I cannot, myself, understand how anybody who has ever used chloroform can become a convert to ether. It takes a good deal of prejudice even to make those who have been its advocates stick to it, and I am glad to say that all of my observations and experiences of this trip tend to show that it is gradually going out of use abroad. Take the world over, and chloroform is now administered five times where ether is resorted to once. There have consequently been a few more deaths, in the gross, accredited to chloroform within the past year, over those attributable to ether; but, when the number of times each was used is taken into consideration, ether has been far the more fatal. I think chloroform is dangerous only when there is grave organic disease of the heart, or in persons addicted to whiskey."

—The will of Dr. Rachel L. Bodley bequeaths her scientific books to the Women's Medical College of Pennsylvania.

NEWS.

—Professor Fürbringer, of Amsterdam, has been suggested for the chair at the University of Jena made vacant by the call to Berlin of Professor Hertwig.

—Dr. Ludwig Knorr has been appointed Extraordinary Professor of Chemistry at the University of Würzburg.

—Professor Celli, of the University of Rome, has proposed to establish a number of meteorological stations in the malarious region encircling Rome, for the special study of the fever and its climatic conditions. The proposal has been favorably received by the Roman authorities, and the stations will be located without delay.

—At the celebration of the 800th anniversary of the University of Bologna, June 13, the degree of Doctor of Medicine was conferred by the University upon S. Weir Mitchell, of Philadelphia, and upon Sir Spencer Wells, of London. Mr. Huxley received the degree of Doctor of Science.

—Dr. B. E. Hadra has accepted the chair of Surgery in the Texas Medical College, and has removed to Galveston.

—Dr. Karl Kilcher, assistant in the Bohemian Laboratory of Pathological Anatomy, died of blood-poisoning, which he suffered while investigating the blood of typhus-fever patients.

—Dr. Squibb says that a very good way to give iodine is by inhalation of iodide of ethyl. Iodine is found in the urine within fifteen minutes after the same number of inhalations.

—Dr. Clara Marshall has been appointed Dean of the Women's Medical College of Pennsylvania.

—Prof. J. Hyrtl, of Vienna, has given six scholarships for medical students, open to students of all nations.

—The *Maryland Med. Journal*, June 16, 1888, states that Dr. George W. Miltenberger, of Baltimore, has met with a painful accident. As he was coming downstairs he fell, breaking the tendon of the quadriceps femoris of the right leg, just above the patella. Dr. L. McLane Tiffany put the injured leg in a plaster-of-Paris splint. Dr. Miltenberger is said to be getting along very comfortably, and, while his injury may be more painful and tedious on account of his advanced age (sixty-nine years), his physician and family hope for a rapid recovery. Nothing more serious than a possible stiffness is anticipated.

—Dr. Burke, an English physician who shot and killed his nine-year old daughter and afterward tried to shoot himself, has been reprieved after being sentenced to death. This was in accordance with a petition signed by many English physicians.

—The *Western Druggist*, June, 1888, says that on account of the serious inconveniences from the use of the copyrighted term antipyrine, which only describes one property of the drug so designated, it will hereafter be called "methozin" in the columns of that journal. This term is simply a diminutive of its chemical title.

—There is to be a Medical College in Memphis called the Jay Gould Medical College.

HUMOR.

CONCLUSIVE EVIDENCE.—"Doctor, I hear that Brigsby has started a new paper." "So I am told, but I haven't seen a copy." "He told me the other day it would be bold and aggressive. I wonder if it's that kind of a sheet?" "I guess it is. I sewed up a scalp-wound for him this morning."—*Lincoln Journal.*

I TOLD YOU SO.—Brown: "You don't look very happy, Robinson." Robinson: "No, I left off my flannels this morning and caught cold." Brown: "That's bad." Robinson: "Oh, I don't care anything about the cold; but my wife told me I was leaving them off too soon."

A HAPPY MAXIM.—"'Onward and upward' will be the maxim of the new paper," said the editor, proudly. And it proved a happy maxim, too. For three short months the paper went onward, and then it went upward.—*Harper's Bazar.*

HUSBAND: "What does the doctor say about your new maid, my dear?" Wife: "He says that there is but slight chance of her recovery, and she promised to be such a treasure. I declare, it's too provoking for anything!"—*The Epoch.*

RECENTLY THE NEWSPAPERS have told the story of a man whose foot was crushed in an accident and had to be cut off, after which death relieved his sufferings. All the accounts closed by saying that the operation by Dr. X. was successful; but, a few days later, blood-poisoning set in, which proved to be fatal. This reminds one of a great man of the last century whom Mesmer boasted of having saved, although he died on his hands. "He died," cried Mesmer, "but he died cured."—*N. Y. Evening Post.*

CORRECT DIAGNOSIS.—Doctor (feeling patient's pulse): "What is your husband's business?" Patient's Wife: "He is a photographer." D.: "Has he been working hard of late?" P. W.: "I don't know, doctor. He took the portraits of four babies yesterday." D.: "H–m! Brain-fever."—*Boston Post.*

HOW IT WORKS.—Bobley—I hear they've been trying the faith-cure on Jawkins. Wiggins—Yes, it's a great thing for rheumatism. Bobley—Indeed! Is he stronger? Wiggins—No; but the rheumatism is. It's got him all twisted up in a hard knot now.—*Judge.*

A SMALL BOY, required to write a sentence containing the word "hominy," produced the following: "Hominy marbles have you?"—*Boston Transcript.*

OBITUARY.

PROFESSOR L. M. POLITZER, M.D.

Dr. Politzer, the eminent professor of pediatrics in the University of Vienna, Austria, died May 23. He was born in Arad, Hungary, in 1814, and obtained his degree in medicine at Buda Pesth and Vienna in 1839. In 1875 he received the title of professor, and in 1880 he was intrusted with the management of the first public hospital for diseases of children in Vienna. In June, 1853, he, together with Mayer and Schüller, started the famous *Jahrbuch für Kinderheilkunde*, to which he contributed many valuable papers.

HOWARD PINKNEY, M.D.

Dr. Howard Pinkney, a well-known surgeon, of New York, died (as we stated in the REPORTER, May 26) on May 14, on a train, while traveling from Southampton to London, England. His funeral took place June 11, at the Church of the Holy Trinity, New York. Dr. Pinkney was graduated at the College of Physicians and Surgeons, New York, in 1860. He was a member of the New York County Medical Society and of the Academy of Medicine, and was one of the surgeons to the New York Eye and Ear Infirmary.

DR. E. GARDETTE.

Dr. Emil B. Gardette, the President of the Board of Trustees of the Jefferson Medical College, died June 17, 1888, at his residence in Philadelphia, in the 85th year of his age. He was graduated from the Jefferson Medical College in 1838, and subsequently became well known as a dentist.

THE

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Clinical Lecture.

INFANTILE LEUCORRHŒA.

BY A. REEVES JACKSON, A.M., M.D.,
PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, CHICAGO, ILLINOIS.

(*Reported by William Whitford, M.D.*)

Gentlemen: This little girl is eight years of age. About two weeks ago, there was noticed for the first time a discharge from her genitals. It was thin, yellowish, and produced excoriation of the labia. Attention was called to her condition by the fact that the child was observed to scream with pain whenever she passed urine, and would at the same time carry her hands to the parts. On examination of the latter by her guardian, the external genitals were seen to be red, and the discharge was oozing from within. Portions of the latter were also smeared upon the child's clothing.

Now, as I expose the parts, you may notice the patchy redness of the skin about the lower parts of the vulva, and extending almost to the anus. As I separate the labia, the redness within their border is seen to be still more intense and to cover their entire inner surface, and also that of the vestibule and the urinary meatus. This is what is termed *infantile leucorrhœa*, and, inasmuch as it differs in some respects from the disorder as it occurs in adults, I desire to call your attention to its peculiarities.

Although termed *infantile* because it frequently is seen in children three or four years of age or even younger, it may present its peculiar features when its subjects have attained the age of twelve or thirteen. It differs from the leucorrhœa of adolescence or maturity especially in two respects—namely, first, in the character of the discharge; and, second, in its locality. The discharge is serous, or purulent, or composed of a mixture of serum and pus, and its seat is the vulva. The leucorrhœas of the adult consist very largely of mucus and vaginal epithelium, with more or less admixture of sebaceous matter; but the vulvar mucous and sebaceous follicles are not developed in childhood, and hence these elements are absent from the discharge of infantile leucorrhœa. Then again, it is rare to find the source of this latter disorder above the hymen.

Very frequently the subjects of this disease are strumous, sometimes the victims of hereditary syphilis, and they are predisposed to it just as they are to certain forms of cutaneous eruption, tuberculosis of the joints, and glandular enlargements. In such children, lack of cleanliness or of other proper hygienic surroundings is sufficient to act as an exciting cause and to induce the discharge. The latter is always acrid, and produces at first itching, then pain, and the child's fingers by their scratching and rubbing add to the irritation, and soon inflammation of the skin and mucous membrane is set up or increased.

There seems to be a popular belief that this disease is very frequently the result of attempts at coition, and suspicion is likely to be fastened upon someone, justly or unjustly—usually, I am glad to say, the latter. In such case, you may be appealed to for your opinion—based, probably, upon that of a prejudiced mother or other relative. Be on your guard. Do not commit yourselves hastily, or you may do someone grave injustice. The courts have held that the

existence of leucorrhœa in a child is not even presumptive evidence of any impropriety or crime, and that the latter, if charged, must be proved by other and wholly independent evidence.

Leucorrhœa in children may be a sequel of acute exanthematous diseases, as smallpox, scarlatina, measles. Ascarides have been accused of traveling from the rectum to the vulva, and settling down there to cause itching and make trouble, but I have never caught them doing so. I knew one little girl in whom a severe purulent discharge was caused by the presence of a half-dozen small pebbles which she had pushed into the vagina.

The treatment is indicated by the pathology of the disease. For cases in which there is evident impairment of or feeble vital power, what is known as general treatment will not only constitute an important, but a necessary, element. Thus, in strumous children, you will need to secure improved digestion and assimilation by the aid, perhaps, of cod-liver oil, iron, cinchona, and still better, if possible, an abundant supply of nutritious food. Another important adjuvant is cleanliness. Usually the subjects of this disease are found with filthy environment, where cleanliness is practically unknown, and a bath for the entire person never taken. But, in addition to these means, local treatment is always necessary. And, before this is commenced, a very careful examination of the parts should be made, in order that one may be assured that neither ascarides nor pebbles are present to maintain mischief. In this case, I fail to find anything of this sort, and, as the child presents an appearance of good general health, and the disease has a short history so far as is known, we may conclude that the cause of the latter has been acting only recently. The treatment will be simple; cleanliness must, first of all, be insisted upon. The parts should be carefully cleansed by separating the labia and gently mopping away the secretion with a piece of absorbent cotton, which may be used dry or moistened with a solution of borax in water—one drachm to a pint. Soap is frequently irritating. Then, after drying the surface, a small pledget of cotton covered with vaseline and freely sprinkled with boracic acid should be placed between the labia. Instead of boracic acid, iodoform, or subnitrate of bismuth, or powdered borax may be used. The cleansing and the renewal of the dressing ought to be done two or three times daily. The objects of this treatment are to soothe the affected surfaces, to absorb the discharge, to prevent the possible adhesion of opposing abraded surfaces, and to protect them somewhat from the access of atmospheric air, the latter being sometimes a source of pain. Under this treatment assiduously conducted, I would expect this little patient to be well in eight or ten days.

COMMUNICATIONS.

SUDDEN DEATH DURING OR FOLLOWING LABOR.

BY THEOPHILUS PARVIN, M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

Whether one believe with the Roman Emperor that the death which is most sudden is that most to be desired, or place it, as is done in the rubric familiar to all, at the climax of earthly calamities, such event is always startling, and usually most painful to the witnesses. This pain is greatest, the misfortune almost without exception the gravest, if a mother dies in childbirth, or soon after. Many causes conspire to make such an event peculiarly sad. The abrupt severing of new ties, the loss of life in giving life, the sharp contrast between an infant living and a mother perishing just when the former so greatly needs the loving care of the latter, are among these causes.

The obstetrician not infrequently suffers public reproach when such an event occurs in his practice, for people are slow to understand how that which is in the majority of cases a simple physiological process may have a fatal issue. Moreover, in some instances, death can be averted if the practitioner, forewarned of its imminence, uses appropriate means; in others, the prophecy of such event as possible, probable, or inevitable may protect his reputation; and in still other cases, if prophecy should fail—the event coming unexpectedly to him as to others, casting no shadow before it—his ability to explain its cause is very important. It is therefore alike the duty and the interest of the obstetric practitioner to study carefully the causes of sudden death in childbirth and in the first part of childbed.

Constant supply of oxygen to the organism, and the regular distribution of blood suitable for nutrition, are the two essentials for the continuing of life—in other words,

the lungs and the heart must perform their respective functions, and thus the tripod of Bichat is replaced by a biped, for the brainless fowl lives, though it instantly perishes if deprived of heart or lungs. In most cases of sudden death, the heart, the *ultimum moriens* of Galen, first stops—or, in other words, death is caused by syncope, not by asphyxia. If death begins at the lungs, the fatal event is usually slow in progress; nevertheless, it may then in some instances be sudden, as from pulmonary embolism, just as, on the other hand, cardiac death does not always occur even rapidly. In still other cases, lungs and heart may both fail, the failure of neither being the exclusive cause of death.

Without designing or desiring to classify the causes of sudden death as cardiac, or pulmonary, or cardio-pulmonary, as observed by the obstetrician, I shall present the chief immediate causes of sudden death.

1. *Death from Mental Emotion.*—The fact that syncope may be caused by a strong mental impression, as fear, anger, joy, or sorrow, is familiar to the profession as well as to the public. A reasonable supposition is that in such cases the impression upon the brain is first reflected to the bulb, then probably through the pneumogastric nerves the bulb itself arrests the action of the heart, and hence the sudden paleness, the cerebral anæmia, and the syncope.[1] Wundt, adopting Kant's classification of emotions into sthenic and asthenic,[2] says that the former kill by apoplexy, and the latter by cardiac paralysis, or rather by the interruption of cardiac function which energetic and persistent excitement of the inhibitory nerves of the heart causes.

Several examples of sudden death from great joy are mentioned by Tuke in his well-known work,[3] and Montaigne has recorded[4] one of the most striking instances in which this was caused by profound sorrow. The familiar lines uttered by Malcolm in "Macbeth" show that the great master of tragic poetry recognized the truth that deep grief might cause fatal syncope:

> "the grief that does not speak
> Whispers the o'er-fraught heart, and bids it break."[1]

The greater nervous susceptibility of woman than of man, and its notable increase during pregnancy, would explain the special liability she would then have to be injuriously affected by a profound emotion, whether of pain or of pleasure. It[2] has sometimes happened that a premature labor has been thus caused, and in rare cases this labor been soon followed by death. But such untoward results are probably, as a rule, only consequent upon powerfully depressing emotions, or those which by Kant were called asthenic, such as great sorrow, grief, or fear, suddenly occurring. In case death follows this premature labor, it may be explained as caused by exhaustion, or the immediate cause may be hemorrhage from uterine atony, this atony itself being the result of the prostrate condition of the system.

Chevallier has collected and narrated cases of sudden death occurring to puerperæ which he attributed to idiopathic

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[1] Strauss. Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Tome trente-quatrième.

[2] Elements of Physiological Psychology.

[3] Illustrations of the Influence of the Mind in Health and Disease.

[4] The story, as told by Montaigne in his Essays, is the following: "In the war that Ferdinand made upon the widow of King John of Hungary, about Buda, a man-at-arms was particularly taken notice of by everyone for his singular gallant behavior in a certain encounter, and, unknown, highly commended, and lamented, being left dead upon the place; but by none so much as by Raisciac, a German lord, who was so infinitely enamored of so rare a valor. The body being brought off, and the count, with the common curiosity coming to view it, the armor was no sooner taken off but he immediately knew him to be his own son, a thing that added a second blow to the compassion of all the beholders; only he, without uttering a word, or turning away his eyes from the woeful object, stood fixedly contemplating the body of his son, till the vehemency of sorrow, having overcome his vital spirits, made him sink down stone-dead to the ground."

[1] The same great poet has, in his "Julius Cæsar," represented Cæsar's death as not the consequence of injury inflicted upon his body, but of profound emotion:

"For when the noble Cæsar saw him stab,
Ingratitude, more strong than traitors' arms,
Quite vanquished him: then burst his mighty heart."

Both these quotations attribute the failure of the heart to its rupture, and this accident is quite possible from emotional causes.

[2] Probably one of the earliest, if not the earliest, of all instances of premature labor caused by emotional disturbance, the labor being followed by immediate death, is that recorded in sacred history concerning the daughter-in-law of the high priest Eli. The great novelist and the great poet, whose pictures are true representations of reality, furnish similar examples. Thus, by way of illustration, in Scott's "Guy Mannering," Mrs. Bertram, suddenly learning the loss of her little boy, and thus subjected to violent sorrow, has a premature labor, and immediately dies. In Shakespeare's "Pericles, Prince of Tyre," Thaisa, the wife of Pericles, is far advanced in pregnancy, when in the passage from Pentapolis to Tyre a storm arises, threatening shipwreck, and the fear of this brings on labor whose end is quickly followed by death.

asphyxia. But, as remarked[1] by McClintock, "some very competent authorities look upon the mortal affection described by M. Chevallier as merely a form of syncope." Undoubtedly the latter term is the correct one. It is remarkable that several of the cases adduced were those in which death followed a strong emotion—in other words, they were instances of fatal emotive syncope. One of these, for example, taken from Morgagni, was that of a multipara who, after an easy labor, was delivered of a girl, her husband and she both being desirous of a boy; the sex of the child was imprudently told her, she was affected with such deep sorrow that her pulse became weak and her skin cold, and in a few hours she died; the autopsy presented no satisfactory cause of the fatal result.

McClintock quotes from Travers the following case: "A young lady, happily married, impressed probably by some unexpectedly fatal occurrence in the circle of her friends, entertained, from the commencement of her pregnancy, a morbid fear of death in childbirth, which, although unwarranted by any indication, became, from its continuance and increasing strength, a source of anxiety to one of her immediate and confidential relatives. She was attended by a skillful and experienced accoucheur, who was also her relation. He assured me that the labor was in all respects easy and safe, and that not a single unfavorable circumstance attended it. The child was still-born and imperfect. The mother died suddenly in six hours after delivery. Every region of the body was examined with care by an eminent anatomist, and presented the appearance of health."

Mordret has taken[2] from La Motte's "Observations" the case of a laborer's wife, who had to accept, though greatly dreading, the services of this celebrated accoucheur in a difficult parturition. LaMotte found an arm hanging from the vulva, and he readily performed version and delivered her of a dead child; the placenta too was delivered, but the woman was trembling, though she had no chill, and, half an hour after the labor, died without previous hemorrhage, pain, or any other appreciable accident. Mordret believes that the death was owing solely to fear.

2. *Death may result from Severe Suffering.*—A temporary syncope from violent pain has been often witnessed not only in females but in males, not only in adults but in children. It is not wonderful that the sufferings of childbirth, if very severe or protracted, should cause sudden death. Mordret remarks that an acute and continued pain is the most active enervant, and many times women die in labor or soon after, and the fatal result cannot be attributed to anything else than the excessive pains of a long and difficult delivery. The elder Ramsbotham and Travers had previously expressed a similar opinion.

3. *Death may be caused by Disease of the Heart.*—Cases of sudden death from fatty degeneration of the heart have been reported by Purefoy[1] and Jenks.[2] That of the former is as follows: The subject was thirty-six years old, and a primigravida. A short time before labor began, she complained of difficult breathing and præcordial impression, and these symptoms increased in severity with the progress of parturition; she died during the first stage. At the autopsy, the uterus and its contents were found in every respect normal; the os was dilated to the size of a crown piece; the presentation normal. The abdominal viscera were healthy; the lungs were in a state of recent congestion; the pericardium contained about two ounces of reddish-colored serum, whilst the heart was much enlarged, being in its greatest length about nine inches, and from four to five inches in breadth at its base. "This organ had undergone fatty degeneration to a considerable extent, with the usual softening of its muscular fibre, and, thus being unfitted for its office, had failed to fulfill its all-important function in the hour of need."

Franz[3] has reported the case of a multipara who died just after the delivery of the placenta, complaining of cardiac distress; the autopsy showed a fatty and dilated heart. Danyau in 1852 also reported a sudden death from the same cause, twenty days after labor.

Rupture of the heart has been in some instances the cause of sudden death of puerperæ. In a case reported[4] by Spiegelberg, death occurred in five minutes, three days after labor, and the autopsy showed rupture

[1] Dublin Medical Press, 1852.

[2] De la Morte subite dans l'État puerperal. Paris, 1858.

[1] Dublin Journal of the Medical Sciences, 1855.

[2] Transactions of the American Medical Association, Vol. xxix, Address in Obstetrics, "The Causes of Sudden Death of Puerperal Women." This address is a valuable contribution to the subject.

[3] Memorabilien, 1874.

[4] Monat. f. Geburt., xxviii.

of the left ventricle as a consequence of acute myocarditis. In M'Nicoll's case,[1] a woman, two weeks after delivery followed by normal convalescence, while getting out of bed, exclaimed: "Oh! nurse, something has given way! I'm fainting." She died in twenty minutes, and upon post-mortem examination there was found an opening half an inch long in the walls of the right ventricle, which were very thin—fatty degeneration of the heart existed, although not to any great extent.

In connection with the first case reported, the views[2] of Coste may be stated. According to him, sudden death after delivery is due either to a hemorrhage, or to a thrombosis of the pulmonary artery, or to a myocarditis. As hemorrhage causes death more or less rapidly, and as, on the other hand, thrombosis of the pulmonary artery appears to be caused by a degeneration of the myocardium, we may conclude that sudden death after labor is almost always the result of myocarditis.

4. *Death may be caused by Rupture of the Aorta* —Henricius has reported[3] the case of a multipara, thirty-eight years of age, who, in the second stage of labor, the uterine contractions being good, and her general condition excellent, had suddenly occurring spasmodic contractions of the lower jaw and of the members for a few seconds, and then died. The forceps was used five minutes after the death of the mother, and a child delivered which was with difficulty resuscitated. The autopsy showed rupture of the aorta, which was attributed to increase of blood-tension caused by the violent uterine and abdominal contractions on the one hand, and on the other simultaneous reaction of the heart against this obstacle.

5. *Death may be caused by some one of the Accidents or Complications of Labor.*—Thus a patient may perish in eclampsia from acute asphyxia, though usually when asphyxia is the cause of death in this disease it is gradual, or it may be rapid, but rarely sudden. Inversion or rupture of the uterus may be immediately fatal in either case from hemorrhage or from shock, or probably in most cases from the two combined. Hemorrhage during labor, both when the placenta occupies its normal site and also when it is previous, and hemorrhage after labor, may be the cause of sudden death.

[1] Lancet, March 20, 1852.

[2] De la Myocardite Puerperale comme cause la plus frequente de morts subites apres l'accouchement. Paris, 1876.

[3] Centralblatt für Gynäkologie, 1884.

6. *Pulmonary Thrombosis* has in several instances caused sudden death, but usually this accident does not occur in the earlier period of childbed, and it is generally preceded by phlegmasia alba dolens. The unhappy victim may have taken the erect or sitting position, after having been recumbent for days or weeks, or made other slight exertion, and death come suddenly almost as if from a thunderbolt.

But death may be caused by embolism just after labor, as a consequence of artificial thrombosis in a uterine vessel. Herman and Brown have reported the following case: An intra-uterine injection of a solution of perchloride of iron was used for post-partum hemorrhage, and the woman died, the death being attributed to an embolus from a thrombus in the uterine vein.[1]

7. *Death may be caused by the Entrance of Air into the Uterine Veins.*—Churchill, who almost alone among writers of works upon obstetrics very fully considers the subject of sudden death in the puerperal woman, states[2] that the absorption of air by the uterine veins was suggested by the younger Legallois in 1829, and by Ollivier in 1833, as being possibly the cause, at least of some, of the sudden deaths after delivery. Hervieux, after a full consideration of the subject, and the presentation of cases of death apparently from air embolism,[3] gives the following conclusions: 1. The incontestible reality of cases of sudden death from the presence of gas in the circulatory system of lying-in women. 2. The impossibility of attributing the presence of these gases to cadaveric cause—that is, to beginning putrefaction; the proved chemical identity of these gases with the gas of the blood, and the probability of their spontaneous development during life; the necessity of attentively watching lying-in women who have had severe uterine hemorrhage, and, although the introduction of air by the uterine veins has not been proved, the duty of the practitioner not to resort to intra-uterine injections except with the greatest reserve, and rigorously conforming to all the precepts of art.

Hervieux's scepticism as to the entrance of air into the uterine veins is not now at least the voice of the profession, for numerous cases have demonstrated the fact. Thus

[1] Obstetrical Journal of Great Britain and Ireland. January, 1880.

[2] Theory and Practice of Midwifery, sixth edition.

[3] Maladies Puerperales.

in the patient[1] of Olshausen, there was employed while she was in labor a uterine douche to hasten effacement of the cervix; she complained of pain, raised herself up in bed, gave some deep inspirations, and died in a minute. At the autopsy, made eight hours after death, bubbles of air were found in the cardiac vessels, in the uterine veins, and in the inferior vena cava. In Litzmann's case, four uterine douches were given with Mayer's pump, to induce premature labor; suddenly the woman became livid, and died in a few seconds. The post-mortem, made sixteen hours after death, showed bubbles of air in the uterine veins and in the ovarian and renal plexuses. Gunz has reported the case of a girl twenty years of age who was found dead in her room, having between her limbs an irrigator, the canula being in the vagina. She was found to be three months and a half pregnant, and the death was shown to have resulted from the entrance of air into the veins, the canula having penetrated the cervical canal. Spontaneous entrance of air is illustrated by the following case: A secundipara, twenty-five years of age, was after an easy labor delivered of her child while lying upon her side; she was then turned upon her back, gentle massage used, and the placenta was expelled. The face suddenly became livid, the respiration labored, the pulse weak; after vomiting a little mucus, and after slight convulsive movements, she became collapsed, and died. At the autopsy, the uterus was found as large as the head of a child, and its walls relaxed. In compressing the posterior wall and the fundus of the uterus at the place where the placenta had been attached, fine crepitation was heard; when the organ was thrown into water, a great number of small bubbles of air escaped. The parts of the uterus near the cervix did not appear to contain air, nor did the veins of the broad ligament, the ovarian veins, or the vena cava.

Another instance is the following: Cordwent has given[2] the history of a primipara, twenty-eight years old, who was delivered while standing of a living male child which fell to the floor, dragging the placenta and membranes with it. A "gurgling" was heard by the attendants, and the woman died almost immediately. At the post-mortem, air was found in the uterine wall at the fundus, in the coronary vein, and in the right heart.

Lauffs has collected[1] 43 cases of air entering the uterine veins. In 17, the accident was caused by injections into the birth-canal; 18 were spontaneous, and 8 resulted from the formation of gas in the uterus. 39 of the 43 were fatal, and the presence of air was proved by the autopsy in 31.

8. *Sudden Death may be caused by an Affection of the Respiratory Organs.*—Mordret quotes from Deviliers a case in which death occurred during labor five or six minutes after sudden aggravation of the symptoms of pulmonary congestion. At the autopsy, no other lesion than congestion of both lungs was found. La Motte has narrated a case in which death occurred suddenly after labor from a severe attack of asthma, and Depaul one in which the cause of the fatal result was pulmonary emphysema. Instances of puerperæ dying from pneumonia or from pleuro-pneumonia have been recorded, but in these cases the death was rapid rather than sudden. Pulmonary apoplexy, however, may cause sudden death.

There have been thus presented the chief causes of sudden death during or after labor. It must be added that, in a few instances in which such death occurred, it has been impossible even by a post-mortem examination to find the cause of the accident.

Merriman, under the head of "*Dystocia Syncopalis*," has given the following report of a case of sudden death in which probably the autopsy would have failed to show any organic lesion: "An accoucheur was once attending a woman in labor with her first child. Soon after it commenced, and during his absence, she fainted without any obvious cause. On his return, the circumstance was mentioned; but, as by this time she appeared perfectly recovered, no further notice was taken of it, and she was safely delivered without any other unusual symptom. On the third day after delivery, she took a dose of aperient medicine, and, while in the act of relieving herself, fell back and immediately expired. Probably no care would have prevented this unfortunate event. It was perhaps inexpedient to give the patient a purgative under such circumstances —a clyster would have been a more appropriate remedy, and at all events an erect posture should have been strictly forbidden."

[1] For these cases, see Braun on Sudden Death from the Entrance of Air into the Uterine Veins. Wien. med. Woch., 1883.

[2] St. George's Hospital Reports. London, 1873.

[1] Ueber Eintritt von Luft in die Venen der Gebärmutter bei und nach der Geburt. Bonn, 1885.

Charles has recently reported[1] a case in which the death was attributed by him to uræmic poisoning.

Spencer has reported[2] the case of an anæmic primigravida, who had eclampsia and premature labor, giving birth to twins; sudden death occurred, and the autopsy showed a large quantity of blood in the abdomen, no rupture of the uterus, but a gastric ulcer with rupture of an artery.

The late Dr. Charles D. Meigs in 1849 directed[3] professional attention to heart-clot as a cause of sudden death in the puerpera, claiming to have discovered that this accident most commonly depends "on the sudden coagulation of the blood that occupies for the time the right auricle of the heart, and, in some of the cases, even that which is in the ventricle and the pulmonary artery." His theory was that, in consequence of hemorrhage, the coagulability of the blood being increased, sudden exertion caused fainting, and in consequence thereof "the blood is likely to become concrete, if it but come to a stop in the auricle."

Playfair in 1871 reported[4] a case of sudden death after labor which he attributed to a thrombus in the right side of the heart and pulmonary arteries.

Haughton has reported[5] the case of a multipara who, ten days after normal labor, left the bed to evacuate the bowels; sudden syncope occurred, and in forty minutes she died. There was no post-mortem, and heart-clot was suggested as the probable cause of death.

Dr. Fordyce Barker states[6] that "observations have demonstrated that clots may form both in the pulmonary artery and in the right cavity of the heart, as a primary lesion."

Pathologists have not settled the question as to the formation of a primary thrombus in the right side of the heart and in the pulmonary arteries, some denying its occurrence.

The preventive treatment of this accident needs only brief consideration. Some of the cases here presented carry their own moral, plain to him who reads; in other instances, no human science and skill could have averted the fatal issue — death was inevitable.

[1] Journal d'Accouchements.

[2] Medical Press and Circular, 1873.

[3] Philadelphia Medical Examiner.

[4] London Obstetrical Society's Transactions, vol. xiii.

[5] Cincinnati Lancet, 1859.

[6] Puerperal Diseases.

It is important that the obstetrician should know not merely the physical, but also the mental, condition of his patient; knowing the latter, he may, by prudent speech and thoughtful suggestion and wise tact, defend her from perils to the body that come through the avenue of the mind. Coleridge said that he was the most successful physician in the treatment of nervous diseases who was most successful in inspiring hope. No matter how learned an obstetrician may be in a knowledge of the phenomena of labor, how great his experience, and how wise and skillful in the employment of artificial aids to labor, he makes his qualifications still greater if he knows how in all cases to inspire hope, dissipating gloomy forebodings, and sedulously guarding patients against all injurious mental influences, whether ignorant suggestions of meddlesome friends, or true statements made inappropriately in manner or time. If ever a woman needs to have both sympathies and antipathies respected, it is when enduring, or when she has just endured, the perils of childbirth.

So far as the actual management of labor is concerned, certain conditions liable to cause death demand artificial delivery. If the woman has been upon her side during the expulsion of the child, and then turns upon her back, this change should not be made without compression of the uterus through the abdominal wall during it. Intra-uterine injections must never be used unless the indication is unequivocal, and then preferably by an irrigator rather than by the ordinary syringe; so, too, injections of a solution of one of the iron salts are to be regarded as a last resort—they are rarely if ever required. Abrupt changes of position, and especially sitting up in the early days of the puerperium, even for evacuation of bladder or bowel, are to be avoided; such precaution is especially required if the woman was anæmic before her labor, or has had post-partum hemorrhage, or hemorrhage during the labor. Mental and physical rest is nature's instinct and nature's law for the puerpera.

MALARIAL COMPLICATIONS.[1]

BY SAMUEL WOLFE, M.D.,
SKIPPACK, PA.

The members of this society are all familiar with the onset and course of the malarial diseases which have during the last

[1] Read before the Montgomery County Medical Society, May 23, 1888.

eight years claimed so much of our time and attention: how about the beginning of the present decade, in a section in which for many years before they were practically unknown, there appeared suddenly over a widely distributed area, many cases of a typically regular form; how those affected and their friends were frightened by the violence of the onset, and hurried their physicians to the bedside; how after being controlled by quinia they recurred again and again; how the typical, regular form, soon degenerated into irregular forms in which it became very difficult to fix the period of intermission, or to decide whether there was an intermission or remission (rural practice not permitting the close observation of hospital or city practice); how, soon graver, more serious forms, which prostrated patients for days and weeks occurred; and how other diseases from the simplest cold to the most intense inflammations and the most lingering fevers were simulated or complicated by the manifestations of paludal poisoning.

You remember also, how we called our first cases ague, chills and fever, intermittent fever, or remittent fever; how we attempted to explain the nature of the cause, and the varieties owning it as their common origin; how our patrons soon applied the name of the cause to the disease, and how first we stood on high ground, yielding only enough to the seductive ease of the situation, to consent to group them under the head of malarial fevers; how we finally capitulated and thus gratified the vanity of the lay diagnosis by calling everything malaria, with the exception of unusually violent or depressing attacks which we called typhoid malaria, or if unusually prolonged, typho-malarial fever.

Our patients too, soon overcame their tendency to become alarmed at the onset, and waited till the urgent symptoms had subsided, and then visited the office, generally saving us the trouble of a diagnosis by telling us, they had malaria. They soon became familiar with the old form of prescription which a rhymester has satirized thus:

"Quinia sulphas, drachma six;
Diluted acid with it mix;
Aqua pura—that's a hit,
Addentur quantam sufficit."

"Misce et signa—English plain—
A teaspoonful, and then again
When three full hours have passed away
And so continue night and day."

We were obliged to seek new forms for our prescriptions as well as new names for the disease, but as the term malaria, however contorted, disguised, or hidden, still made the groundwork of our nosology, so the drug quinia, however substituted, dissolved, coated or encapsuled, still was the bulwark of our therapeutics.

"Let me quote again
Whose anti-periodic powers
Professors eulogize by hours,
Anti-pyretic virtues too,
Ascribe to it, and so I do."

Indeed, from August, 1880, up to the present day, whether in summer or winter, I have seldom made a round of visits, that did not require an anti-periodic prescription. So constantly have diseases occurred, due purely to miasmatic causes, or complicated with a periodical impress which experience has taught me will require an anti-periodic to eradicate.

Now in view of these statements, I should like to take the liberty to consider that our venerated fellow-member, and my very warm personal friend, Dr. Hiram Corson, in his article, "Quinine—its Use and Abuse," published in The Medical and Surgical Reporter of May 5, 1888, has been a trifle severe in some of his statements. Not only does he want us to be more sparing in the use of quinia, but also to restrict the use of the term malaria, and thus to wrest from us the sinecure which to a large extent we have attained against our will.

The term, as a name for a class of diseases of which it is only the cause, as Dr. Corson says, objectionable as it is, is hardly as much so to my mind as the term typho-malarial fever. This appellation, I am certain, is frequently applied to remittents or irregular intermittents. If it has any proper place, it is to designate those cases in which the malarial and typhoid fever poisons are acting simultaneously on the same system. Why not call these cases of typhoid fever, and admit the malarial fever, whatever its form may be, as a complication just as we admit the existence of other complications, without in each instance, coining a name. It only falls short of the term typhoid pneumonia, so much used, in being needless, the latter, however, being more misleading, in tending to convey the idea that a disease (typhoid fever) is present, when it is not. It might of course be well urged that the greatest mistake lies in applying the term typhoid to the specific disease, which is better designated as enteric fever, but long usage, and the accepted understanding of it, will still plead for the term.

During the long period in which malarial fevers have been prevailing, the great majority of individuals have been in one or another way affected, and in many cases a decided cachexia has been established. We are not therefore without warrant, in many cases coming to us in which some other disease is undoubtedly present, in also recognizing a malarial complication, and trying to do, what Dr. Corson sarcastically calls, "getting it out of the system." Indeed it has very frequently been my experience that so soon as the patient has been "cinchonized," not only has the complication disappeared but the disease also, a result it would have been in many cases very irrational to expect had not the entire trouble been of malarial origin.

A few months ago, I was called to an unmarried woman, aged eighty-five, who for three or four days had been aphasic. The onset had been tolerably sudden. The patient could seldom get beyond a few words in framing a sentence. There were no other paralytic symptoms, except possibly a little distortion of the face. No fever, appetite fairly good. For about ten days I visited her at intervals of a few days, having used iodide of potassium, ergot, strychnia, and a blister to the mastoid process. The aphasic condition had remained about the same. In the course of my attendance, I gathered from her nurse that there was possibly the slightest tendency to better control of words in the evening. I gave her four grains of quinia sulph. every four hours for two days, and the trouble had disappeared with the exception of an occasional hesitancy in getting a word. She took Fowler's solution in three minim doses thrice daily for several weeks, and her condition is still as good as it was immediately after the use of the quinia. She can converse well, and complains of nothing but the debility incident to her age, and a sore pressure point immediately below the right ear.

About six years ago, I attended a man eighty-one years of age, who had had repeated attacks of intermittent, when one day he suddenly fell unconscious, after which he lay with blowing respiration and other usual signs of apoplexy for about six hours, when he slowly revived, and next day was sitting in his chair, chewing his tobacco, a picture of perfect senile contentment, rational, and apparently well. Next day he had a repetition of the same apoplectic signs, from which he again similarly recovered. He was brought under the influence of quinia, and had no recurrence.

An unmarried woman of fifty, a kitchen servant of mild and equable disposition, who had previously suffered from several attacks of "malaria," became possessed with the delusion that the members of the household and others were conspiring to kill her; could not be reasoned out of it; was in such a condition that if a commission in lunacy had at that time visited her, she would undoubtedly have been recommended to go under the care of the State. A slight evening remission was noticed, which was taken advantage of to administer full doses of quinia. In less than a week her insanity was gone, and has not returned, some five or six years having now elapsed, in which she has several times had intermittent fever.

Illustrative cases might be multiplied, and could doubtless be supplied by every physician in the county, but enough has been said to show what errors in diagnosis and treatment may occur, if we underestimate the importance of this fruitful source of disease; if we do not recognize the chronic systemic derangements to which not only its open and active attacks, but also its insidious and stealthy presence, may lead.

The initial symptoms of an attack—the chill, the headache, the short but intense fever, the aching pains, the vomiting and general depression all point to the nervous system, as being the portion of the organism more especially impressed by the cause of the disease, whatever its nature may be. The disturbance in nutrition, neuralgic pains, and general depression of the powers of the nervous system, all indicate that in the interference with its functions is established that state recognized as a cachexia. In permanent changes here lies probably the cause of the periodic impress which is given to all diseases, attacking an individual who has suffered repeated attacks of some one or of different forms of miasmatic disease; an impress which Dr. Maclean has conclusively shown to exist, and which he claims never wholly disappears.

It is, however, worth while to consider in this connection, that the original cause of the disease may continue to exist, and that while we acquire an immunity from the disease to such an extent that no active symptoms manifest themselves until the system becomes affected by another disturbing agent, then, when the resisting powers are sufficiently weakened, an outbreak may occur. This hypothesis would seem to be fortified by the fact that in the treatment of diseases under such circumstances, quinia

and other anti-periodics seem to exercise an unusually decided curative influence. And may it not be that from these very circumstances arises the great discrepancy in the opinions of various writers in regard to the value of quinia in certain diseases. As for myself, I believe that where quinia in doses beyond those required as an ordinary tonic does good, there is likely to be a malarial complication.

A CASE OF ACCIDENTAL CASTRATION.

BY JOEL CRAWFORD, M.D.,
YALE, VA.

On March 14, 1888, I was called at night several miles away in the country to arrest hemorrhage in a case of traumatic injury to the scrotum of a lad. On my arrival, I learned that the lad, while in the act of ascending a ladder, had been precipitated to the ground, and his scrotum, coming in contact with a stake which was driven into the ground near the foot of the ladder, was lacerated to the extent of about one inch and a half, the tear beginning at a point at the lower part of the raphe and extending obliquely upward and to the right over the right testicle, completely severing the excretory duct and other structures of the spermatic cord. The testicle was attached to the urethral portion of the cord only by a small filament of the tunica vaginalis. The septum of the scrotum had a small punctured wound in it, through which protruded a mass of apparently organized matter, which I at first mistook for the left testicle; but which I afterward learned, to my great pleasure, was composed principally of soot, salt, etc., which had been used locally for the purpose of forming a clot. The most singular feature about it was that a filament, extending a short distance through the punctured wound, similar to that attached to the right testis, was attached to this clotted mass, simulating a contused and lacerated testicle. As there was marked swelling and contusion of the parts, the left testis was not ascertained to be in situ and uninjured until the cavities were cleansed of the various débris, domestic styptics, clots, etc. The hemorrhage was readily checked, the edges of the wound were approximated and kept in position by sutures and adhesive plaster, and an antiseptic dressing soon brought about union by the first intention.

NEURALGIA.

BY BYRON F. DAWSON, M.D.,
KEWANNA, IND.

A case of neuralgia of great severity, suddenly shifting from one seat to another and yielding under prompt and vigorous treatment, occurred recently in my practice, and I think it is worth reporting.

The subject was a man, forty-three years old, a brick-maker, formerly an ex-soldier, married, addicted to the use of tea, coffee, whiskey, and tobacco, both chewing and smoking (a good neuralgic subject), though he has drunk little for several months. His father was an habitual drunkard.

March 26, 1888, he called at my office in an interval between the paroxysms of an attack of angina pectoris. For several months he had had irregular attacks of a very distressing præcordial pain, lasting from a few seconds to a minute or more, with a feeling of constriction about the chest, the pain shooting upward to the left shoulder and down the left arm, the uneasiness in the chest often continuing for several days. His occupation requires that a great deal of fuel shall be provided for summer work, and this he did largely alone during the winter, thus exposing himself to the severity of the elements. Once or twice while hauling wood, paroxysms came on and he had to drop his wood and catch hold of the wagon to support himself. In fact he presented all the characteristic symptoms of an attack of neuralgia of the heart. Careful inquiry elicited no family history of angina pectoris. He gave a history of repeated attacks of rheumatism, but on examination no cardiac lesions were found, though the valvular sounds were more feeble than normal; the pulse rate was 56, and feeble. He was of constipated habit. I gave my diagnosis and informed him of the danger of a continuation of his then present habits. He was ordered to abstain from the use of tea, coffee, whiskey, and tobacco. The following was given:

℞ Ext. Belladonnæ fld.
Ext. Digitalis fld. . . . . āā f℥ ss.
Ex. Nucis Vomicæ fld. . . . . f℥ i.
Glycerini . . . . . f℥ i.
Aquæ . . . . . q.s. ad. f℥ iv.
M.S.—Teaspoonful before eating.

He was also directed to take ten drops of Fowler's solution, well diluted, after eating.

Forty-eight hours later I was sent for to see the same patient at his home in the country. As regards the chest trouble

I found great improvement. He said he felt no pain there, and that he could throw his shoulders back and take a full breath, something he had not been able to do for months. At this time I found him sitting in a large rocking-chair, in great pain and scarcely able to stand or lie, and he slept none during the preceding night. Soon after beginning treatment as above the chest pain moderated, then a lumbago began, and soon there followed the ordinary symptoms of a well-marked double sciatica. Pain was produced by pressure behind the great trochanter, in the popliteal space, and at other points lower down in the course of the nerve; none by pressure over the kidneys. There were the distinct paroxysms of intense pain, and the dull ache in the intervals. The pulse was about normal, at 70; temperature, 99°. No family history of sciatica.

The patient was ordered to bed, and directed to use morphine (1-6 gr.) every two hours until relieved of pain, then as required; and four grains of potassium iodide and four minims of fluid extract of gelsemium in water every two hours, and a blister over each sciatic nerve. The former treatment was discontinued, except the Fowler's solution. Owing to either a misunderstanding or fear the morphine was not given, and he suffered greatly until four o'clock the following morning, when vesication began; relief was almost immediate, and the patient then had some refreshing sleep. The blisters were afterward renewed once. From that time convalescence was established, and five days later he came to town to an election, and in another week discontinued all treatment saying he "felt as good as ever." Since then he has been in his ordinary health, with no symptoms of either angina pectoris or sciatica.

In regard to the treatment of neuralgia in general—not specific—most standard authors advise the use of quinine and morphine, or with the addition of atropine, continued as circumstances require. Such treatment is undoubtedly successful as regards the neuralgia in most cases, but the danger of establishing a morphine habit is so great as to deter most physicians from the long continuance of such treatment. Iodide of potassium is recommended and used largely because of its power to cause absorption of exudates in or around the nerves, producing neuralgia by pressure. It is a safe remedy to use, as are also the various preparations of iron. Bartholow says of arsenic that it is "one of the most powerful of the so-called nerve-tonics." These various agents as forms of constitutional treatment in chronic neuralgia have all proven useful in my hands.

As an anodyne I have found a very satisfactory substitute for morphine in a compound recommended by various English authorities, but not by any of the American writers whose works I have examined, namely, fluid extract of belladonna and glycerine, equal parts, used locally; and certainly there is little danger of acquiring a "habit" in the use of this compound.

An admirable feature about this combination is that a powerful anodyne is kept constantly in solution in close proximity to the painful part by a vehicle that renders the skin soft and susceptible to the influence of such agents. This is a desirable substitute for the hypodermic injection of atropine which authorities recommend, for reasons that are evident, since it places the same narcotic agent in the same affected region under circumstances favorable for its absorption. Probably a solution of atropine in glycerine and alcohol, or the oleate of atropine, would prove as beneficial and at the same time be more cleanly, but I have not yet made the experiment.

The use of the fluid extract of belladonna in this manner without quinine has given me good results in cases of facial, dental, cervico-brachial, and intercostal forms of neuralgia. In gout it has proven useful, but in some cases the glycerine is objectionable and another vehicle must be chosen. Of course while this agent is being employed, constitutional treatment should not be neglected.

THE ARREST OF HEMORRHAGE FROM WOUNDS OF THE PALM OF THE HAND.

BY R. J. LEVIS, M.D.,
PHILADELPHIA.

My experience with hemorrhage from wounds of the palmar arches is that it is usually controllable by maintaining extreme elevation of the hand. This is most thoroughly effected, and with the least discomfort to the patient, by vertical suspension of the limb, the attachment being made along the palmar and dorsal surfaces of the forearm by adhesive strips, after the ordinary manner of making extension in the treatment of fractures. A cord from the adhesive straps may be fastened to the top of a bed-post or other convenient elevated point.

If posture alone should not arrest the

hemorrhage, the most effective compression can be made by placing in the palm of the hand an india-rubber ball, or a ball solidly made of cotton wadding, and on this the fingers and thumb should be closed and bound tightly with a roller bandage.

Using these expedients I have never been obliged to ligate arterial trunks for the arrest of hemorrhage from the palm of the hand.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, June 13, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. William H. Parish read a paper on

Delivery Before the Seventh Month.

In the management of delivery prior to the seventh lunar month, the welfare of the mother is alone considered. The non-viability of the embryo or fœtus removes it beyond consideration. It is true that the question as to whether the threatened abortion or miscarriage is inevitable or not will frequently arise, and will challenge our most anxious study, for upon the continuance of the pregnancy hangs the life of the intra-uterine being if it is still living. It is my purpose, however, in this brief communication to discuss the management of only the inevitable deliveries prior to the viability of the offspring, and not to treat in extenso of any other part of the general topic of abortion or miscarriage.

The impossibility of ascertaining the number of abortions occurring in any large community has been generally recognized, so that the conclusions based upon figures given as to the proportional ratio of the number of deliveries of non-viable children compared with labors after the seventh month are unreliable. It is my belief, also, that the mortality following abortion or miscarriage cannot at present be arrived at even to an approximate degree. The desire to conceal the cause of death either because of the illegitimacy of the pregnancy, or because of criminal interference, or because of the known tendency of the gossiping, to ascribe all such deliveries, especially if fatal, to criminal interference, leads to the writing of misleading certificates. Some of the deaths ascribed to septicæmia, or pyæmia, or typhoid fever, etc., are deaths following abortions or miscarriages. Treatment must be based, however, not only upon the actual risk of a fatal result to the mother, but also upon a full appreciation of the fact that improperly-managed deliveries of non-viable offsprings entail upon the woman a number of serious conditions. Subinvolution of the uterus and of all the structures functionally associated or closely related by position is of frequent occurrence. Septic endometritis with septic endosalpingitis, ovaritis, and localized peritonitis, adhesions, crippled ovaries imprisoned, it may be, in lymph deposits, fixed and occluded tubes, permanently-damaged endometrium, acute uterine flexions and prolapse, and septic blood infection with impaired nutrition and nerve exhaustion—such are, in addition to a fatal termination, some of the results to be guarded against by judicious treatment. Again, many cases of acquired sterility are traceable to abortions or miscarriages, and extra-uterine pregnancy, known now to be of greater frequency than was formerly supposed, may be doubtless, in many instances traceable to tubes damaged by abortions.

He, then, who bases his treatment only upon the desire to save his patient from death, has not grasped the full indications of his case. To prevent death from hemorrhage and from intense blood poisoning is certainly his duty, but not his whole duty. His whole duty rests upon the indication of restoring the woman to the conditions of health both locally and generally, so that the various structures, especially of the pelvis, may be uninjured, and the various functions, especially of the sexual and related organs, may be performed with physiological ease and safety. Delivery during the early weeks of pregnancy is attended with a minimum of risk to life, yet subinvolution, often with endometritis and endosalpingitis, frequently follows such an abortion. About the third month begins the actual danger of death from hemorrhage and septicæmia, and this danger increases as the period of pregnancy at which delivery occurs advances up to the time when viability of the child begins and the phenomena of labor at full time more or less pertain. It should be borne in mind that crippling of the functional sexual capacity of the woman is liable to result whatever the period of non-viable delivery.

The treatment of such a delivery is divisible into the expectant and the active plans. The chief difference between these two plans consists, on the one hand, in securing artificially the emptying of the uterus if nature

does not effect this promptly, while on the other hand, such interference is strictly avoided, at least until symptoms determine danger to the patient. During the early weeks, there not arising practically any danger of loss of life, the plan of non-interference is not departed from by its advocates, and is adopted by not a few of those who resort to the more active treatment in the more advanced deliveries.

In early abortions, say prior to the end of the second month, in addition to rest for eight or ten days in bed or on the lounge, I have practised during late years antiseptic cleansing of the uterine cavity by means of one injection of a corrosive sublimate solution 1 to 4000; after the escape of the ovum I resort to only one injection and always use a return-tube catheter. I have not thought it necessary to resort to the curette prior to the second month, except when by reason of instrumental interference septic infection is especially liable. During the third month, in addition to the antiseptic intrauterine injection, I use a smooth wire curette, preferably immediately after the escape of the ovum, resorting at the same time to the injection. It is during and after the third month that dangerous hemorrhage may arise. If the patient is confined to the recumbent posture danger from this source, however, rarely occurs. If the bleeding appears, however, before the os is sufficiently dilated to admit of emptying the uterus, I tampon both the cervical canal and the upper vagina. For this purpose I prefer strips of baked cloth, because of the ease of introduction and of removal. Antiseptic syringing is resorted to both before the introduction and after the removal of the tampons. The tampon should not be resorted to as a routine treatment. Hemorrhage that is not controlled by the postural treatment and by cold applications, is the only indication for the tampon. After the os is dilated the best way of treating the hemorrhage is to empty the uterus and to inject into its cavity hot antiseptic water. In the absence of serious hemorrhage, the rule to avoid rupturing the membranes should be rigidly adhered to, inasmuch as an unbroken ovum tends to prevent or to check hemorrhage, and if the ovum is delivered with unbroken membranes, the placenta is most likely to be expelled in an intact condition. If the membranes have been broken, the embryo or fœtus usually escapes from the uterus, while the placenta and membranes remain within the uterus and are probably adherent to it. Suppose the embryo or fœtus has escaped, then, as is well known, the placenta and membranes will usually be expelled within twenty-fours, yet in a large proportion of cases they will remain within the uterus for days, weeks, or months. Does the continuance of the placenta within the uterus for even a few days at a non-viable period of pregnancy bring dangers to the patient? The answer to this must be absolutely in the affirmative. Such danger is a very considerable one to life from both hemorrhage and septic infection. And even should the patient escape with her life, I do not believe that anyone ever escapes without serious injury to the child-bearing apparatus. Under such circumstance arise conditions which are likely to produce sterility or to determine subsequent abortions. Such patients suffer, it may be throughout their sexually active lives, with disturbances of the functions of the vagina, uterus, tubes, ovaries, bladder, and rectum with varying degrees of other local and constitutional suffering.

Septic changes of the products of conception under such favorable conditions of warmth, moisture, and contact of atmospheric air are developed so rapidly, that although absorption is probably not so rapid as at or near the full period of gestation, no one can say how soon the process of septic infection begins. The incipiency of such blood-poisoning is not heralded by any definite symptom. Even the rise of temperature, as shown by the thermometer, is not fully reliable unless observed every hour or two; and to wait until hemorrhage, or a rapid pulse, or a chill, or decidedly high temperature supervenes, will prove in not a few instances to be waiting until a fatal result is inevitable. Or should the uterus have emptied itself within a few days without evidence of danger of death, still in the great majority of such cases I believe that grave, and it may be permanent local damage will have resulted. We are told to let the placenta remain until there are evidences of danger and then to remove it. Wherein is benefit to be derived from such a rule of practice? Is it not wiser to take due precautions against fire than passively to await the development of flames within the building? An abortion or a miscarriage is a non-physiological accident, it is unnatural and pathological. There is no weight then in the argument that artificial removal of the placenta is unnatural and unphysiological and hence should not be resorted to. Its retention brings to the woman her greatest danger both as to life and to future

usefulness. A uterus promptly and rightly emptied, uninjured by traumatism and rendered aseptic, becomes a source of comparatively little, if any, danger.

As in labor after the child has become viable, so in abortions or miscarriages ergot is of great service after the uterus is empty. It then encourages involution, checks excessive lochial flow, expels clots, and lessens septic absorption. Before the uterus is empty this drug is seldom of more than limited value, and often is productive of actual harm.

When the hemorrhage is considerable and the ovum is intact, its administration will aid in controlling the loss of blood, but even here the tampon is usually sufficient. I believe that I have repeatedly seen the use of ergot retard the completion of the delivery by determining an undilatable condition of the cervix. Such belief has been strengthened by finding that under such circumstances the administration of an opiate hastens the delivery by relaxing a cervix that has been rendered rigid by ergot. In incomplete miscarriage, there is nothing more uncertain than the action of ergot. After its use the uterus may not empty itself for days or weeks, while the cervix closes so as not only to prevent the escape of the placenta, but also to prevent easy artificial extraction.

If you decide upon emptying the uterus, what is the best method of doing so? Prior to the third month the small size of the cervical canal renders the introduction of the finger difficult, and the curette is here sufficiently efficient, either before or after the escape of the ovum. The thickened decidua may then be readily removed with this instrument.

After the third month we have chiefly the placenta to deal with, and here the introduced finger is safer, more efficient, and more reliable than any curette. The finger more thoroughly and more certainly removes all the products of conception, and tells the presence or absence of such complications as polypi, fibromata, etc. When reliance is placed solely on the curette, the uterus may be supposed empty when it is not; fragments of placenta and of membrane, or even the entire placenta may be left, with extreme risk to the patient.

If one is present at the time of the escape of the embryo, and the placenta remains, he should at once, while the os is dilated, introduce his finger into the uterus, and while depressing and steadying the uterus with the other hand over the abdominal wall, dissect off *en masse* and completely the secundines, and remove them. To effect this it may be necessary to give an anæsthetic. After emptying the uterus it should be at once syringed with a hot corrosive sublimate solution.

There will be, in all probability, no indication for a repetition of the intrauterine injection, though daily intra-vaginal antiseptic syringing for eight or ten days has been my practice. If the case is not seen until several hours have elapsed and the placenta is still within the uterus, and ergot has not been administered, the os will be sufficiently dilatable to admit of an immediate resort to the prompt treatment. If at that time the cervix has already contracted because of ergot, the suspension of the ergot and the administration of an opiate, with non-interference of a few hours, will secure a dilatation of the os to such an extent as to permit the emptying of the uterus with the finger. If a number of days or weeks, or months, have elapsed and the symptoms indicate an incomplete emptying of the uterus, and the cervical canal is closely contracted, it will be better to dilate either with laminaria tents or with graduated bougies and to introduce the finger, than to rely upon any form of curette. After grave septic poisoning has occurred, a cervical canal that has been previously contracted undergoes a relaxation, and the placenta becomes detached or is so loosely adherent that its removal with the finger is usually a very simple procedure, and is, according to even the expectant practitioner, urgently demanded; but, immediately following removal of the placenta under such circumstances, evidences of more intense poisoning are frequently observed, and in many such cases a fatal termination eventuates.

There is but one form of curette that should ever be used for the removal of any of the products of conception. The perfectly dull wire curette is the only safe one. Every form of the sharp-edged instrument should be absolutely avoided. Simon's scoop is a dangerous instrument in the hands of the most careful. Much of the opposition to the curette is based upon the use of that or other cutting instrument. Even with the dull wire due caution must be used not to injure the uterus. A softened womb may be penetrated by even a dull instrument. My preference for the finger over the curette is based, however, rather upon the uncertainty as to the efficient working of the dull curette than upon its dangers. It would seem scarcely necessary to caution any one

not to mistake the somewhat elevated and roughened placental site for portions of the placenta itself; but in one instance I saw such a mistake made by an inexperienced gentleman who made active efforts with Simon's scoop until the uterine tissue was extensively gouged into by that dangerous instrument. Experienced men have left large masses of placenta—in fact, the fœtus and its placenta both—*in utero* after the cavity has been curetted. The possibility of double pregnancy with separate placentæ must not be lost sight of. I have seen an instance in which the physician removed with his finger under anæsthesia one fœtus with its secundines, and left within the uterus unrecognized a second fœtus and its placenta until uterine contraction secured their expulsion.

I have not referred to the various complications of non-viable deliveries. They are numerous and may call for special additional measures, but the management of the delivery rests upon no peculiar principle. Criminal abortion brings with it greater dangers, but usually the management does not differ materially from that of the non criminal delivery. In the criminal variety septic infection may occur before the abortion or miscarriage has begun, and the expectant plan of treatment is attended with the greatest dangers. An injudicious introduction of the sound may engender a septic inflammation of the endometrium and determine a fatal result before any part of the ovum is expelled. Under such circumstances non-interference contributes to death.

In inevitable abortion I have repeatedly emptied the uterus by compressing the body between two or three fingers within the vagina and in front of the uterus, and the other hand over the abdomen. I have also secured, in a few instances, a prompt ending of an incomplete abortion or miscarriage by the injection of hot water into the uterine cavity, of course securing its ready outflow. The hot injection awakens active corporeal contractions with cervical relaxation, and, if the fluid is antiseptic, diminishes the danger of infection.

Dr. William Goodell, in opening the discussion, said: I take exception to but one point in this admirable study, and that is to the use of the dull curette. I have given up the use of the dull curette for several reasons. There is great danger of wounding the endometrium in its soft, thickened, and vulnerable state; then there is this very danger the speaker has mentioned, of mistaking the placental site for tissue that should be removed, and the further danger, which he also admits, of perforation. I am sure that I once penetrated the wall of the uterus with a sound, and without using any force—though, fortunately, I escaped an evil result. There is danger of wounding that portion of the uterine wall which is not at all implicated, if I may so express it; and especially, two or three days after the abortion, would this cause a liability to the creation of a fresh raw surface upon perfectly healthy tissue, with additional danger of infection.

I use two styles of forceps—one, a small catch-forceps, which will seize anything that projects, or still better, a small fenestrated polypus forceps, which can grasp any projecting mass, however small, and that only.

Dr. Regar: How can we tell that the uterus is completely cleaned out? The finger cannot always determine with certainty. How long are we to keep up examinations and attempts at cleansing?

Dr. J. B. Walker: May we not answer the preceding speaker by saying that as long as the os is patulous, the uterus contains something that needs removal; after removal, contraction will occur. That has been my experience in several cases. I would ask Dr. Parish whether the rule holds good in all cases?

Dr. H. A. Slocum: I rather fear to follow the advice given to permit the ovum to escape entire. I remember two cases which fortunately terminated favorably—but which gave me much anxiety—in which the escape of the ovum entire was followed by alarming hemorrhage. One of these was in a well-developed florid woman, who had a history of repeated miscarriages. When I was summoned she was bleeding slightly, and the labor-pains were strong and constant. With my finger in the vagina, I waited for the ovum to be expelled entire. It came with a gush of blood that blanched the ruddy face of the patient and left her pulseless. I was compelled to remove the pillows, elevate the foot of the bed, and, with finger and hand, endeavor to excite uterine contractions, after which, with hot water injections and other appropriate measures, the bleeding was controlled.

When a uterus is distended with its contents, and the placenta leaves its site, and the large mass is suddenly expelled, it seems to me that the sinuses will be left wide open, and the contractile vigor of the uterus will not suffice to close them.

I agree with the advice to remove the

placenta as soon as possible. I remember a case, however, in the practice of a distinguished practitioner, in which—for what reason I do not know—it was left for six weeks free in the cavity, becoming hard and leathery, and was then removed under anæsthesia. My only connection with the case was to give ether, so that I know nothing further of the circumstances than that the placenta remained for six weeks without giving rise to any bad symptoms.

Dr. W. E. Ashton: I would take exception to the speaker's low estimate of the value of ergot. While I will agree that it is contra-indicated, except with a tampon, yet if the tampon be introduced and ergot then administered, the effect will be much more prompt and sure, and the presence of the tampon will prevent anything like hour-glass contraction. After a complete abortion I should consider intra-uterine antiseptic irrigation uncalled for, and rather dangerous as tending to introduce air, and, therefore, germs, into a uterus which is otherwise in an aseptic condition.

Dr. Parish: In reference to the use of the dull wire curette, Dr. Goodell could not have heard my remarks, or I must have failed to express myself clearly. I do not use it except at one stage, that is the third month—never after the placenta has been formed. I prefer the finger for many reasons, as I stated. Even with the dull instrument there is some risk of injury, and the method is unreliable. Dr. Goodell and I accord perfectly, after the third month. Before the differentiation of the placenta, however, the smooth wire curette will detach and remove the deciduous membrane with no danger.

I have used forceps, though not exactly the same form as spoken of, but the objection is that we cannot be sure with any form of instrument whatever that the uterus is empty. The finger alone tells us that. It is not only a therapeutic but a diagnostic appliance. It must be very rare for the uterus to possess the power to expel the ovum unaided, and then fail to take care of itself. There must be some special morbid condition to which the hemorrhage is due. In the case narrated by Dr. Slocum, with its history of frequent miscarriages, I should have suspected a polypus.

I do combine the use of ergot with the tampon, should the latter be insufficient when the ovum is intact, especially if the ovum is intact to give a smooth mass on which to contract. Antiseptic injections are indicated after such a pathological process as a miscarriage. I doubt if the uterine cavity usually closes air-tight after such a process. Not infrequently there is a separation of the uterine from the fœtal layer of the placenta with adhesion of the uterine portion. This adherent maternal layer is liable to give rise to septic inflammation and general infection.

The patulous condition of the cervix is, to some extent, an evidence that the uterus is not empty, but the reverse does not hold good. It would be unsafe to conclude that everything had been expelled because the os was found to be contracted.

Hospital Notes.

TREATMENT OF POST PARTUM HEMORRHAGE AT THE PHILADELPHIA LYING-IN CHARITY.

BY CHARLES P. NOBLE, M.D.,
SENIOR ASSISTANT PHYSICIAN.

Hemorrhage, post partum, comes either from the vessels of the relaxed uterine body or from lacerations of the genital canal. The term post partum hemorrhage is usually employed to indicate hemorrhage from inertia uteri after delivery. Indeed, the influence of lacerations is often overlooked.

The indications in hemorrhage from laceration, post partum, are plain, even if their fulfillment is not always easy—bleeding should be arrested by suturing the tear. The laceration may be of the vestibule, vulva, perineum, vagina, or cervix. Rupture of the body of the uterus presents so many serious complications that the resulting hemorrhage is often relatively a trifling matter. This accident has not occurred among the cases in the Charity during my connection with the institution. Lacerations involving the bulb of the vestibule are very troublesome, but fortunately are rare. The venous oozing is often obstinate and controlled only by the insertion of numerous deep interrupted sutures, or the use of the continuous suture. The continuous gut suture finds one of its most useful applications in the immediate repair of tears in the genital canal, especially when hemorrhage is the chief indication for closure. By its use the operation of suturing is quickly performed. All lacerations of

the perineum, excepting very superficial ones, are immediately closed. Silver wire requires less subsequent attention than other suture material, but silk is often used with equally good results. If sepsis occurs, infection along the silk stitches is apt to cause pain and require their removal. For this reason I prefer silver wire or silk-worm gut. Profuse hemorrhage has occurred in a number of cases from tears in the pelvic floor. A few arteries have required torsion before placing the sutures. Lacerations along the anterior and lateral walls of the vagina are more common than is supposed. They are not found because they are not looked for. In only one case have sutures been employed. This was in a primipara, whose labor was completed before the arrival of the medical attendant. There was a bilateral laceration of the cervix, which extended, on the left side, the whole length of the vagina and involved the perineum. Dr. Wilson sutured the entire laceration with silver wire. This is also the only case in which immediate trachelorrhaphy has been done. The patient recovered, but suffered from sepsis during the puerperium. In the cases at the Charity, lacerations have by no means been limited to instrumental cases. Immediate trachelorrhaphy is not indicated except for the arrest of hemorrhage. Experience here and elsewhere has proved that cervical rents heal kindly if the puerperium is normal.

Post partum hemorrhage proper, is due to inertia of the uterus. It has occurred after long tedious labors, in which frequently the forceps were necessary to complete the delivery. In ordinary cases, delivery of the placenta by the Credé method, which is followed more or less strictly by the various members of the staff, together with the subsequent administration of ergot, has been sufficient to insure permanent contraction and retraction of the uterus. The binder is always used, but solely with the view of promoting the comfort of the patient. Its influence in causing or keeping up uterine contraction must be slight. It has seemed to me that etherization favors hemorrhage, since it has been necessary to push it to the surgical degree, on account of the struggles of the patient under partial anæsthesia. In this respect it differs from chloroform; for with chloroform, often the patient need not be made unconscious, or only at the height of the pains, and thus systemic relaxation is not induced. The fall of the pulse to or below the normal, and the continuance of contraction of the uterus for half an hour or longer, are considered reliable indications that danger is over. The practice of keeping the hand on the hypogastrium for half an hour after delivery, so that the condition of the uterus may be constantly known, is unquestionably of the greatest value in forestalling relaxation of the uterus. The fact that no case of terrific post-partum hemorrhage—so graphically described by writers, in which in a moment the bed and floor are deluged with a stream of blood, and in which the patient is suddenly brought to the brink of the grave—has occurred, I attribute to the method of conducting the delivery of the placenta, and the careful watching of the state of the uterus for some time afterward. While I would by no means question the occasional occurrence of these unfortunate cases when every prophylactic measure has been employed, because such have been reported by accurate observers, yet it must usually be due to a contraction suddenly emptying a large amount of blood, which has been slowly accumulating in a flaccid uterus. Kneading the uterus through the abdominal wall is the most generally applicable method of securing uterine contraction, and it has often succeeded in arresting moderate hemorrhage.

The hot water, intra-uterine douche (110°–115° F.), after kneading of the uterus has failed to secure contraction, has been most often employed, with the invariable result of arresting the hemorrhage. Indeed for post partum hemorrhage, as ordinarily encountered, this is the best remedy. Not only does the hot water stimulate the uterus to contract, but it acts as a general stimulant as well. The water should be as hot as can be borne by the patient, and should be disinfected by sublimate. The only objection to the method is that it requires some minutes to get the apparatus ready. In ordinary cases this does not signify, as the flow can be arrested or temporarily diminished by kneading the uterus. The chief advantages of the method are the certainty with which it arrests the bleeding, and the fact that it leaves the utero-vaginal canal free from clots and in an aseptic condition.[1]

The introduction of ice within the vagina or uterus has not been much employed. This method has the advantage of being immediately applicable; but, on the other

[1] The late Dr. A. H. Smith, for many years connected with this institution, was an ardent advocate of the use of hot water intra-uterine injections for the arrest of post partum hemorrhage.

hand, it has serious disadvantages. The cold from the ice acts as a systemic depressant, and is disagreeable to the patient. The operator in the hurry is apt to neglect to disinfect his hand. And the ice itself may prove a source of infection, as Prudden has shown that ice is full of bacteria. It would seem that this measure of treatment should be held in reserve to be used only after the failure of other methods, or in cases where nothing else is at hand.

The hand has been introduced within the uterus in a few cases. In these the hemorrhage usually came on before the expulsion of the placenta. After separating and removing the placenta and clots, the uterus was gently irritated by the hand, assisted by friction through the hypogastrium, until contraction occurred, when the hand was slowly withdrawn.

Vinegar has not been used. I should think the best way to use vinegar would be to add it to the hot water and inject it within the uterus.

No case has called for styptics, nor would their employment be considered justifiable at the Charity until all other measures had failed. I should decidedly prefer Churchill's compound tincture of iodine to a solution of iron.

Faradism, although a promising agent, has not been employed. It has the advantage of entailing no dangers on the patient, and will unquestionably be tried.

Spraying the bared abdomen with ether is highly recommended. It has none of the disadvantages of dashing cold water on the patient, and should certainly be used to the exclusion of that procedure.

Much may be done in the general management of these cases. In hospital with trained assistants the physician is not so apt to lose his head, as when alone or surrounded by a frightened family. A confident and reassuring manner goes far to bring order out of confusion. When syncope threatens the patient's head is lowered and brandy, whiskey, or ether administered hypodermically. Ergot is always apt to excite nausea, and especially so when given after profuse hemorrhage. Systemic depression induced by vomiting would tend to increase the inertia of the uterus. Hence ergotin or the fluid extract of ergot is administered hypodermically. Ergot is most useful in keeping up contraction and retraction of the uterus which has been already brought about by kneading or the use of the hot water douche. No death from hemorrhage has occurred in the practice of the Charity.

Foreign Correspondence.

LETTER FROM BERLIN.

At the last meeting of the Society for Mental and Nervous Diseases, of Berlin, Dr. Albert Moll made a report upon hypnotism, and exhibited many illustrative cases. In Germany not so much attention is given to this subject as in France. At the same meeting, Dr. Moll also described the different degrees of hypnotism, following the French Professors of Nancy. He lays special stress upon the following, viz.: That hypnotism is a psychical state, and that objective symptoms are not necessary. "Because the latter is not regarded sufficiently, many cases of real hypnotic state have been mistaken for simulation. Only through much experience and by studying minutely the whole impression, and not through one single symptom alone, can we recognize simulation." Among different subjects which Dr. Moll showed, one case in particular is interesting, viz.: a case of pruritus, which he has treated and healed by suggestion during hypnotic state.

I will not omit to call your attention to a work just published in Berlin entitled "Bibliographie des modernen Hypnotismus, von Max Dessoir." It contains a very careful collection of the names of all works which have been published upon hypnotism during recent years. Through this work, we learn that in America the French investigations have not proved unsuccessful, and that several articles upon hypnotism have already been given in your journal. I would recommend the above named book to every one who intends to occupy himself with hypnotism. The clear and methodical classification which is given in this work, considerably lessens the difficulties which occur to every one who must search the necessary literature for himself. M. Dessoir will continue this work and, after a certain time, he will give regularly a review upon all new works respecting this subject. He therefore begs that all new works upon this matter should immediately be sent to him (Max Dessoir, Berlin, Kœthenerstrasse 27).

Dr. Leopold Casper, one of our cleverest doctors for the surgical diseases of the urinary organs, has communicated to the Medical Society of Berlin a new treatment for hypertrophy of the prostate. After having given a short historical sketch of the different treatments of this disease, and having called attention especially to the method

of Dr. Newman of New York, Dr. Casper described his own new method of treating the same. It consists in the application of electrolysis. The first trials were made upon animals, in order to prove clearly whether this method was dangerous or not. After having seen that it was not dangerous, Dr. Casper began to try the treatment upon men, in the following manner: The patient is turned over on the side, the rectum is filled with three fluid ounces of a solution of a mercuric chloride (1–1000). The indifferent pole is the positive, a large plate of 400 grm. It is applied to the abdomen. The electrolysis-needle must be pricked into the prostate from the rectum, and that part of the needle which remains beyond the anus must be fixed on to the negative pole of a galvanic battery. By degrees twelve cells are added, and the current has to be closed five minutes. After this time the needle must be slightly withdrawn, to enable one to turn it in the same hole, but placing the end of the needle in another direction. This is to be repeated for the third time, and each time the current has to be closed for five minutes. The strength of the current is from 10 to 25 milliampères. These sittings are to be made, according to the state of the individual, up to as many as twenty times. Dr. Leopold Casper has treated four patients in this manner. Three times it has proved successful. Of these three cases two have been greatly benefited. At all events Dr. Casper has shown that the operation, carefully executed, is perfectly harmless. In the discussion a recognition was given to the praiseworthy idea of Dr. Casper for this new treatment of the hypertrophy of the prostate.

Induced through the favorable reports of American medical men, Dr. J. Rosenberg has, in a case of a very severe attack of biliary colic, used olive oil in large doses with success. The case in which this oil was employed was that of a woman who had been suffering from this disease for the last five years, and who until now has been treated in different ways, but without any success. The pain had become, during the last year, almost unbearable; she had such great difficulty of digestion, that the whole constitution became extremely weakened. Through the administration of twenty-six fluid-ounces of the oil of olives, in five doses, 629 gall-stones passed per anum, the largest of which was one inch in length and ¾ inch in width. Her sufferings have become considerably lessened, and an almost perfect recovery has been the result of this treatment. ALBERT MOLL, M.D.

Berlin, May 25, 1888.

PERISCOPE.

Quinsy Treated with Cocaine.

At the meeting of the Clinical Society of London, May 11, 1888, Dr. de Havilland Hall read notes of three cases of acute parenchymatous tonsillitis, or quinsy, treated with cocaine. In the first case, a laborer, 28 years old, was admitted into the Westminster Hospital, September 28, 1887, suffering with quinsy. He had had two similar attacks in the last five years. On admission, he had been ill four days. The right tonsil and adjacent soft parts were enormously swollen, and he was unable to swallow without the greatest difficulty and pain. On the 30th, there was complete inability to swallow, but, after painting a twenty per cent. solution of cocaine freely over the whole of the fauces, the patient was able to swallow some bread and milk. The same night the left tonsil became affected, and the cocaine solution was applied again next day with an equally good effect, and the day following he was able to swallow bread and butter. No suppuration occurred. The patient left the hospital quite well, after being in one week instead of four and three weeks respectively, as on the two former occasions.

In the second case, a publican, 25 years old, was seen in consultation with Mr. Wright at Kennington, October 26, 1887. When seen, the patient's complexion was dusky; he was suffering with some dyspnœa and dysphagia. Both tonsils and the soft palate were greatly swollen, and were covered with a viscid secretion, but there was no false membrane. Pulse 120, feeble. Urine, specific gravity, 1030, loaded with albumin. The patient's condition was a most anxious one. The throat was swabbed out with a twenty per cent. solution of cocaine, and the application was repeated in ten minutes. Five minutes later, the patient was breathing more easily, and was able to swallow half a pint of egg, milk, and brandy. During the next two days, applications of cocaine were made night and morning, and one on the third day. The patient gradually improved, no suppuration occurred, and a week later the urine was free from albumin, and he was well.

In the third case, a porter, 39 years old, attended at the Throat Department of the Westminster Hospital, November 16, 1887, complaining of sore throat and inability to swallow for thirty-six hours. He was previously quite well. The left tonsil and adjacent parts were swollen, and there was a

yellow patch on the tonsil. Pulse 88, fair volume. Temperature 102.2°. The urine contained a trace of albumin. A twenty per cent. solution of cocaine was applied, and the patient was soon able to swallow half a pint of bread and milk. Four days later the patient had no difficulty in swallowing, and was practically well. In all three cases, as soon as the patients could swallow easily, tincture of the perchloride of iron, with or without quinine, was ordered.

Dr. de Havilland Hall pointed out that cocaine had a twofold action in these cases; it diminished the sensibility of the parts to which it was applied, and at the same time lessened the blood-supply, hence deglutition was much facilitated. He also thought that it checked suppuration. He advised the throat to be sprayed out with a solution of bicarbonate of sodium, ten grains to the ounce, before the cocaine was applied; by this means less cocaine was needed, as it appeared that cocaine acted more efficaciously in the presence of an alkali. Dr. Semon said he had seen cases in which cocaine had been too freely used. Patients obtained cocaine pastilles from the chemist and used them indiscriminately. A woman, suffering with asthma, with cough, coryza, etc., being ordered a ten per cent. solution, procured a twenty per cent. solution, which she used occasionally to the nostril for two years. One night, after so using it, she awoke from sleep feeling very ill, and with her heart's action very irregular. She recovered after a time, and had since then had a wholesome fear of cocaine. Another patient—a man—had severe poisonous symptoms from the use of only the sixth part of a grain. Dr. Semon was of opinion that some patients could not use it; on the other hand, he had seen a patient suffering with tonsillitis—who had had aphagia for twenty-four or thirty-six hours—become able to swallow with some comfort only ten minutes after an application of cocaine to the fauces. Dr. Hall, in reply, mentioned that last week he had applied a twenty per cent. solution of cocaine to the nostril of a young and strong man, who was very much affected by it, became faint, and had to lie down for nearly an hour before the effects passed off, although ether and other stimulants were given. He always applies the solution now with a brush, all the cases in which untoward symptoms had showed themselves having occurred when he used the spray. He remarked that peri-tonsillar inflammation seemed to take place in some cases when practically no tonsillar tissue was left. He thought that cocaine was of use only in parenchymatous tonsillitis; the same good results had not followed its use in follicular tonsillitis.—*British Med. Journal*, May 19, 1888.

Anomalous Scarlet Fever.

In the *Practitioner*, February, 1888, Dr. William Squire discusses anomalous scarlet fever, with special reference to the recent epidemic of scarlet fever in London, and to the epidemic of "suette miliaire," which prevailed in Poitou, France, in 1887. Anomalous rash, perspiration, and perhaps rheumatism, he says, seem to be most common in summer; bad throats, cough, and congestion of lung in the winter; diarrhœa and jaundice, the latter rare, are less associated with season; while constipation is more an accident of prolonged convalescence. Any sore throat in the autumn, or any affection of the tonsils, with spots or ulcers in the winter, is to be looked upon with suspicion. In the summer, persons with sore throats, adults especially, go out and neglect the febrile disturbance with which it commences until they see the redness extending from the neck or wrist where the collar or cuff has rubbed. With children in bed, he says, a limited patch of redness on the abdomen, back, or groin, instead of at the neck or wrist, is found. This irregular scarlet fever may at first pass under the names of *erythma fugax* or *multiforme*, and later extensions of the rash be called *lichen ruber*. In another form of scarlet fever rash, acuminate papillæ are seen, perhaps minutely vesicated at their apices. When perspiration accompanies the eruption, fine sudamina may occur. Petechiæ and spots of purpura have, not unfrequently, been seen. Sometimes the rash may appear as a mere suffusion of the surface so transient as to be overlooked in children with delicate skin; in older persons the skin may have a harsh or rough surface, which, with swelling of the neck, face, and eyelids has passed for erysipelas. With reference to the epidemic in London, he says:

"The first case was the son of a medical friend residing to the north-west of London, who was seen by me one summer with this accident during the eruptive stage; he had had a hot bath the evening before on the sudden ingress of suspicious symptoms. A younger brother, who was his companion at a day-school, now remained at home, and a few days after had similar symptoms, and though no hot bath was given, perspiration accompanied the eruptive period." Another instance fresh in his memory is that of two

tall well-grown lads, recently arrived in London, living in lodgings with their mother. One evening in May the elder, a medical student, felt suddenly ill; he perspired profusely in the night, and remained next day in bed with sore throat, fever, rash, and perspiration. The last symptom continued during a well-marked scarlatina eruption; small raised spots of epithelium and dried exudation were soon left on the face and chin, and sudamina formed on the chest amidst the scarlatina rash. The younger brother, attending a large day-school, was kept at home, and shortly after symptoms of scarlet fever began in him, also with perspiration.

Neither of these cases was of great severity, and no infection was spread from them, or there might have been a form of scarlatina of all degrees of severity propagated, with perspiration as one of the characteristics. Albuminuria was not found in any of the anomalous cases here described, though looked for, he says, carefully in all stages of the illness.

Perspirations with sudamina were frequent in the anomalous scarlet fever described in the November number of the *Archives générales de Médecine*. (See REPORTER, November 26, 1887, p. 713.) The name *rougéole* is there used merely because the first fatal cases among young children were so registered; reports from different localities agree that the attack is not like that of ordinary measles; it begins with vomiting, it lasts longer, it is a bad sort, very fatal even to those who have already had measles; the rash differs, it spreads uniformly, pearly spots are seen on the red surface when there has been much perspiration; there is after-peeling of the skin in flakes—a sufficient proof of scarlatina. The chief anomaly was profuse perspiration, this marked the fever accompanying the eruption; the next anomaly was a violent cough and some coryza before the rash, and swellings of the eyelids, but, as is noted, these symptoms preceded the rash by only one day, and not by three or four days as in measles, though bronchial râles in some cases were heard later; moreover, clear instances of short incubation are given with the pertinent question: "Is there a form of measles with only one day of incubation and one of invasion?" In the half year up to midsummer, in a population of 20,000, rather more than 2,000 cases occurred with 200 deaths; at first young children suffered most, some of these with the special sweating that became a marked feature in adults affected by the exanthema, and which soon got to be looked upon as a new form of "sweating sickness." Another anomaly was a pause in the evolution of the rash, sometimes a second interruption, with renewed fever and perspiration as the further eruption appeared; this was limited to the first week of the attack and to the worst cases. Instances of true relapse occurred in the first few weeks of convalescence; with renewed rash, the fever and perspiration recurred, sometimes with more severity than at first; relapses are mentioned as late as the second or third month. Headache and epistaxis were frequent; petechiæ often accompanied the rash; passive hemorrhages, if late in appearing, were not of bad augury. Convalescence was tedious, sometimes with a very slow pulse or with palpitation, and often lasted six weeks; constipation was common, and often œdema of the legs and feet; albuminuria was not detected, but seems not to have been searched for in any great number of cases nor at many intervals in any one case. Without precise records of such examination it is impossible to affirm that albuminuria was absent. In one case anuria lasted some hours with subsequent return of the normal secretion. The danger to life was greatest during the eruptive period, and death after the fifth day was rare. The disease was eminently contagious, the incubation short; in some districts only the rash was noticed, in others the perspirations were superadded, and these cases, mostly adults, would give rise to other attacks with rash only in infants. The eruption described is quite characteristic of scarlet fever; it appears on the second day; it is uniformly diffused on the body while yet scattered on the limbs or in bright spots on the back of the hands and feet; the sore throat shows smooth redness of tonsils and redness of the palate with brighter points visible; minute red points slightly raised are to be seen and felt on the skin, the redness was often very marked at the wrists; after perspirations traces of small miliary vesicles are found on the chin and cheeks; pearly spots are seen upon the redness of the chest, and on the wrist the sudamina sometimes coalesce; this is quite distinct from the after desquamation found in all the cases.

The value of the paper from which these facts are gathered is increased by an account of six similar epidemics—three of these are certainly associated with scarlet fever, as in that of 1863 described by Dr. Bordes, of Beauvais. In severe epidemics of this kind it is curious to see how popular ideas revert

to traditions both of small-pox and measles; in this epidemic of Poitou some of the fatal cases with hemorrhagic spots were called "black measles" in memory of the hemorrhagic small-pox of fifteen years before; just as in Sydenham's time fatal scarlet fever in England was called "confluent measles."

The Surgical Treatment of Malignant Growths.

At the meeting of the Massachusetts State Medical Society, June 13, 1888, a paper on the Surgical Treatment of Malignant Growths was read by Dr. Maurice H. Richardson, of Boston. Dr. Richardson's paper was based upon an analysis of all the cases of easily accessible tumors treated by excision in the Massachusetts General Hospital from November 1, 1877, when antiseptics began to be used there, to January 1, 1887. These probably included some growths not malignant, and to a certain degree the statistics are not accurate, but some justifiable inference can be drawn from them. It was intended to investigate the subsequent history of all the cases so far as possible. Of the 833 cases, 498 had been heard from; and of these 251 were living and 247 were dead. Dr. Richardson took issue with Dr. Hodges' recent statement that operation for cancer of the breast is exceptional or soon will be. From the tables he had compiled he was led to believe that early diagnosis and excision in malignant growths were advisable. Two prominent causes of failure were lack of thoroughness and insufficient attention to glandular infection. Operation for cure should not be done unless all the growth can be removed, but of course operations for mere palliation do not demand this condition. The best time is the earliest possible, and removal should be complete without reference to scar or mutilation. The infection of lymph-glands was almost a contra-indication for operation. The speaker would, in operating for mammary cancer, dissect out the axilla and remove all its fat. This method adds to the danger of the operation and impairs the mobility of the arm.

Dr. H. H. A. Beach, of Boston, said that the statistics, if somewhat disappointing at first sight, are a verification of the traditions and experience of the hospital surgeons in operations for the removal of malignant disease. The apparently slight increase in mortality in breast-cancer may be fairly accounted for by the fact that cases which were not considered appropriate ones for operation some years since, because of glandular infection, are now, with the aid of modern antisepsis, made less dangerous undertakings to the patient in so far as *septic* disease is concerned; but the mortality from a more rapid recurrence of the cancer is inevitably greater in many of the cases, from the fact that a majority of the patients report to the hospital too late to insure a radical removal of the disease.

A class of cases in which it is impossible to make a wide sweep into the healthy tissues, or one sufficient to insure a long immunity from recurrence, the relief from pain and hemorrhage resulting from the removal of a mass of disgusting disease, with strict antiseptic precautions to insure the patient from a worse set of symptoms through septic poisoning, justifies operations that otherwise should not be undertaken.

Many operations of this character are done in all large hospitals, where proper after-care and attention are practicable. Such cases show a rapid return of the disease, and so unfavorably impress statistics. They are none the less justifiable if they furnish a reasonable amount of relief. While it has been claimed by an eminent authority, on the one hand, that the time would come when cancer of the breast would not be operated upon, strong arguments are presented, on the other, in favor of its local character and of operations calculated to radically remove the disease by excision of the breast and clearing out the axilla.

Surgeons of large experience will readily recall cases in which to have followed the first dicta would have consigned their patients to a premature grave, in place of years of comfort and happiness. To have accepted the second would have put them in the position of attempting an anatomical impossibility: that of *completely* removing the glandular, lymphatic, and fatty structures of the axilla, excepting in the cadaver. Either of the tissues named may be infected by the disease, and the only excuse for clearing the axilla that can be reasonably offered is that it is in the usual line of the extension of the disease, and provides for the removal of a wider periphery of sound tissue from the centre of infection. This procedure may offer a longer immunity from recurrence, if done sufficiently early, the gland having been enlarged by irritation in place of infection, and time *may* prove it to be a cure, but for the present the question is yet undecided for want of sufficient evidence. —*Boston Med. and Surg. Journal*, June 28, 1888.

THE

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CHARLES W. DULLES, M.D., EDITOR.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

RHEUMATIC PERIPHERAL NEURITIS.

The clinical symptoms and physical signs of an ordinary attack of acute articular rheumatism are almost as well known to intelligent laymen as to physicians; but there are phenomena occurring during, or subsequent to, an attack, which are not described in text-books on medicine, and are scarcely mentioned even in monographs on rheumatism. Such phenomena are paralysis and atrophy of muscles, anæsthesia in the course of peripheral nerves, and occasionally enlargement of the ends of bones. In a communication in the *Medical Chronicle*, June, 1888, DR. JUDSON S. BURY calls special attention to peripheral neuritis in acute rheumatism, and to the muscular atrophy which occurs in connection with affections of the joints. He does not lose sight of the fact that muscular atrophy has long been noticed as one of the accompaniments of other diseases of the joints, but, on the contrary, seeks to determine how far the element of joint disturbance, which is common to all the joint affections, may account for the atrophy, and if there are other factors at work in the rheumatism itself which are equally potent with the former in setting up muscle waste. His paper is a very complete one, containing an account of the history of eleven cases, and is illustrated with numerous wood-cuts, showing very clearly the appearances occasioned by the atrophy.

It is impossible, in the space we can spare, to do more than give a condensed statement of the conclusions of Dr. Bury's study. He believes that we continually meet in articular rheumatism with the muscular atrophy and paresis which are common to other joint affections; and that, while the sudden onset of these symptoms appears to be best explained by a reflex mechanism, by which an irritation from the joint is conveyed along sensory nerves to the cord and inhibits in some way the functional activity of the motor cells in the anterior horns, yet the progressive character and duration of the atrophy suggest organic changes, either central or peripheral. He regards the presence of increased tendon reactions, and sometimes of contractures, as indications that there may be changes, not only in the motor cells, but also in the terminations of the pyramidal tract, or in that network of nerve fibrillæ by which they are supposed to be connected with the ganglionic cells—changes which are probably organic.

One of the most common, as well as the most conspicuous, of the muscle atrophies, is that of the interossei of the hands. This Dr. Bury refers very plausibly to an ulnar neuritis, pointing out that in ulnar paralysis the index and middle fingers are less affected than the two inner fingers, because the outer two lumbricales are supplied by the median. He also thinks that rheumatism seems to attack especially the adductor pollicis and the abductor indicis. He finds confirmatory

evidence of neuritis in the frequency with which impaired cutaneous sensibility is met with in the ulnar nerve territory, along with thickening and tenderness over the trunk of the nerve itself. It must not be inferred that the ulnar is the only nerve affected, for there is good reason to believe that other nerves of the brachial plexus, as well as the branches of the lumbar and sacral plexuses, are also frequently attacked. He regards it as of great significance that these peripheral nerve symptoms may occur in a limb quite free from joint irritation, as, for example, during early convalescence from rheumatic fever.

Dr. Bury's conclusion, therefore, that there are justifiable, if not conclusive, grounds for believing in the existence of a rheumatic neuritis, seems moderate and well borne out by the facts; indeed, his whole paper bears evidence of having been the result of thorough study, and is rendered especially valuable to one desiring to follow up the subject by having a copious bibliography appended to it. Dr. Bury devotes no space to a consideration of prognosis or of treatment; but it will occur to the thoughtful physician to carefully watch, from the beginning, every case of rheumatism, if only for the purpose of giving the patient and his friends timely warning of the commencement of a muscle atrophy which may seriously impair his future usefulness. Another thought, which it is well to keep in mind, is that it may be possible, by the selection of a suitable climate, to prevent attacks of rheumatism, and so put the patient in the best possible condition to recover lost power, or, at least, to resist further increase of the atrophy.

IMPROVED CÆSAREAN SECTION.

In order to appreciate what has been done by the improved Cæsarean section, it is necessary to review the status of the classical Cæsarean section, and its substitutes, the Porro operation, and laparo-elytrotomy. The classical Cæsarean operation has been performed in America about one hundred and forty times, with a maternal mortality of sixty per cent., and a loss of fifty-eight per cent. of the children. In Great Britain the maternal mortality in one hundred and eighteen cases, collected by Hull, Radford, and Harris, was eighty-one per cent. Mayer, quoted by Schröder in 1874, gives the maternal mortality in Germany, in seven hundred and twelve cases, as fifty-three per cent.; in France, in three hundred and forty-four cases, as fifty-five per cent. Charpentier estimates the mortality at from fifty-four to sixty per cent. The results were especially bad in hospitals; all the cases operated upon in the Vienna Hospital, and in the Paris Maternité for nearly a century, had proved fatal. This mortality, though fearful to contemplate, is by no means surprising when all the circumstances are considered. The operation was usually done as a last resort, often after the failure of all other operative methods; the women were often in labor for days, with tissues bruised or lacerated from instrumental interference, perhaps already septic; the uterine suture was seldom employed, and the method of operating was often haphazard and utterly bad. The wonder is that so many recovered. Harris, in 1879, published the reports of twenty-seven timely operations, carefully done, in this country, with a saving of twenty mothers, and the delivery of twenty-two living children. This shows the possibilities of the classical section when carefully performed. Laparo-elytrotomy has been done twelve times: six mothers recovered, and eight children were delivered alive. The Porro operation, in one hundred and sixty-four cases, has saved scarcely more than forty per cent. of the mothers.

The steps of the improved Cæsarean section may be succinctly described as follows: 1. The usual preparations for abdominal section; 2. Emptying the bladder, shaving the pubes, and carefully disinfecting the abdomen, vagina, and external genitals; 3. Incision in the linea alba; 4. Incision in

the uterus, in the middle line, avoiding the inferior segment—the abdominal walls must be held firmly and closely against the uterus to prevent the entrance of blood or liquor amnii into the peritoneal cavity—; 5. Extraction of the fœtus, by the feet or head; 6. Eventration of the uterus, placing a sponge or napkin under it, stimulation of the uterus by friction—the abdominal walls must be held together to prevent the escape of the intestines while the uterus is covered by warm, wet, antiseptic napkins—; 7. Separation and removal of the placenta and membranes; 8. Irrigation of the uterus, if indicated, with sublimate solution, and introduction of an iodoform pencil; 9. Placing the sutures: (a), deep sero-muscular sutures, eight, ten or more, of silk or silver wire, avoiding the mucosa; (b), superficial, sero-serous Lembert, twenty or more of silk; 10. Toilet of the peritoneum, with sprinkling of iodoform along the uterine incision; 11. Suturing the abdominal wall; and the dressings usually employed after laparotomy; 12. Expectant after-treatment. The Müller modification, of long abdominal incision, uterine eventration before incision, with elastic ligature to the cervix, has been generally abandoned. Resection of the muscularis, as proposed by Sänger, has also been omitted. The elastic ligature may be necessary after extraction of the child and eventration of the uterus, while the sutures are being placed; or hemorrhage may be controlled by manual compression of the cervix, or by torsion of the uterus. Placenta previa Cæsaria is to be met by rapid incision, extraction of the fœtus, and separation of the placenta, or by torsion of the uterus and incision beyond the placental border, should the diagnosis be made before incision. Injections of ergotine are useful to insure uterine contraction. The most essential features are early operation, asepsis, and careful uterine suturing.

The improved Cæsarean section is commonly styled, especially in Germany, Sänger's operation. Aside from the disadvantages of personal nomenclature, it is more than questionable whether Sänger has claims to such a distinction. There is no question that the present interest in the improvement of the technique of this operation has been largely brought about by the writings and influence of Sänger, and for this he certainly deserves, and has received, great credit. But it can hardly be maintained that he has added anything new to the method, since the excision of the musculature has been abandoned, and the principle of the approximation of peritoneal surfaces had been recognized and employed in practice, and the double sero-serous suture had been used, before he published his book in 1882. Lungren, of Ohio, in 1875 and 1880, employed the suture so that the peritoneal surfaces are retained in contact until union takes place, and all danger of escape of fluids is averted; and Baker, of Indiana, brought his carbolized silk sutures out at a short distance from the incision through the peritoneal coat, so that when they were tied, they brought the peritoneal coats together first. Spencer Wells, in 1881, clearly proved the advantage, not alone of a sero-serous suture, but of deep muscular sutures as well. This applied to the removal of tumors from the non-pregnant uterus. But Kehrer, in 1881, used a double row of sutures, muscular and sero-serous, thirty-five in all. The deep sutures were passed through the mucosa, and not through the peritoneum. Sänger especially emphasized the necessity for a large number of sutures, particularly for the superficial row, and dwelt upon the danger of infection where the mucosa was included in the sutures. Moreover, were it established that some step in the operation was first suggested by Sänger, it would be contrary to all precedent to prefix his name to the operation, for it was first performed by Leopold in its various details, while Sänger's name appears as the eighth on the list.

The indications for the Cæsarean section

are either absolute or relative—absolute, where it is impossible to deliver a mutilated child by the natural passages—relative, where the pelvis is so contracted that the fœtus cannot be delivered at term without mutilation. All obstetricians are agreed upon the propriety of Cæsarean section where the indication is absolute, but they are by no means unanimous as to the criterion by which to estimate the indication. While it is generally stated that a diameter of one and a half inches in one direction and three inches in the other is absolutely necessary to extract even a mutilated child, yet Osborne extracted through a pelvis of eight-tenths of an inch, and Pajot has succeeded by his method of "repeated cephalotripsy without traction" with a conjugate of less than an inch and a half. Charpentier, who does not accept the relative indication, says, "for the majority of accoucheurs the indication is absolute, under one and one-half inches." Playfair, Barnes, and Galabin, who occupy the same attitude toward the operation, say the same. Tarnier considers the indication absolute at one and nine-tenths inches. Naegeli and Grenser consider two and five-tenths inches as the extreme limit for embryotomy. Cases in which the indication is relative should be divided into those in which section and those in which embryotomy is safest for the mother. Reliable statistics of embryotomy, suitable for comparison, are difficult to obtain, because most of the statistical tables were compiled before the antiseptic era, and better results could now be had. Maygrier reports thirty-two cases of cephalotripsy, true conjugate two and one-half inches, mortality forty per cent., twenty cases, true conjugate two and three-tenths inches, mortality fifty per cent. Jaggard, however, has collected three hundred and fifty-nine cases in the hands of expert operators, reported between 1871 and 1883, with a mortality of only five and fifty-seven hundredths per cent. He expresses the opinion that with pelves above six centimetres, cranioclasis, after Braun's method, properly performed, should give a mortality of zero. It must also be remembered that Van Huevel's forceps-saw and Hubert's transferator have given most excellent results. While it is by no means proved by reliable statistical evidence, it may be accepted that in pelves not exceeding two inches in the conjugate, embryotomy is more fatal than Cæsarean section, and it is generally stated, especially in Germany, that section is the safer under two and one-half inches. Some would raise the indication to three inches with a living child. The improved Cæsarean is now in fashion, and the tendency is decidedly toward widening the relative indication. The mother's wish, after a fair presentation of the facts, is the strongest indication. Where the dangers from section and embryotomy are about equal, the life of the child should be considered, perhaps also when the mother is suffering from mortal disease, as cancer. But bold is the operator who wilfully endangers the mother to save the child, for, as Cazeaux justly says, "the experience of centuries proves, supposing all the infants to be extracted alive, not one-half will reach the age attained by their mothers." The limits for embryotomy should be somewhat lowered, with a dead fœtus; also, *cæteris paribus*, if the woman has been long in labor. Section is sometimes called for where delivery is prevented by pelvic tumors or inflammatory deposits.

The improved Cæsarean operation has been done about one hundred times. Sänger stated, when the number had reached seventy-six, that over seventy-six per cent. of the mothers had been saved. Of these, fifty-two were operated on in Germany, saving over eighty-eight per cent. of the mothers. Perhaps the most successful series was the first sixteen cases, under five operators, in Leipsic and Dresden, saving fifteen women and all the children. Leopold has had the largest experience, and has saved over ninety per cent. of the mothers. Lusk heads the American list

with three successful cases. The first five American cases were all fatal from late operation. The results of the later ones are much better. Finally, the Cæsarean section may be considered absolutely necessary in pelves with one and a half inches, or less, in the conjugate, and under certain other rare conditions, and the operation of election with a conjugate not above two and a quarter, perhaps two and a half inches, since it is not more dangerous than embryotomy, and saves the child. Above this limit, section should only be done at the request of the mother. With a dead fœtus, embryotomy should be done with a conjugate above two inches, provided the transverse diameters are not too contracted. The German results show that the true maternal mortality of the operation, skillfully done, is about fifteen per cent. The chances for the fœtus being born alive are approximately those of natural delivery.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

It has been our painful duty on more than one occasion to call attention to certain defects in the editorial management of the *Journal of the American Medical Association.* If these defects had been in mere matters of taste, we would perhaps not have criticized them; but they were of a more serious character, and, in our opinion, required correction if the Journal of the Association was ever to become an example to all other journals, of the highest type of medical periodicals. These criticisms seem to have had a salutary effect; for there has been a noticeable amendment in the Journal since they were made, in regard to some of the matters criticized.

A recent number—that for June 23—contains, however, a long letter, signed by one of the assistant editors of the *Journal*, and addressed to the editor of the MEDICAL AND SURGICAL REPORTER. It is dated June 11. The readers of the Journal might suppose it to be a copy of a letter sent at that time to the person to whom it is addressed. But the writer, and the editor of the Journal, will probably be less surprised than its innocent readers to learn that the person to whom the letter is addressed first saw it when the mail brought him, on June 25, the copy of the Journal for which he subscribes.

The matter of this letter is an attempt, in two and a half pages, to weaken the force of a very short statement made by a correspondent of the REPORTER, writing from Cincinnati at the time of the last meeting of the American Medical Association.

We will let our correspondent's statement go as it stands and make no attempt to add force to what he says. The members of the Association may make up their minds in regard to the matter without urging from the REPORTER. But we may reply with propriety to an insinuation contained in the letter in the *Journal* that the REPORTER has an interested motive in criticizing the Journal. The fact is that we wish to see the *Journal* fulfilling its legitimate office in the very best way, and if we call attention to its faults, it is with the hope that it will mend them. To point out what seems to us to be ill-advised, on the score of principle or of sound policy, is a kindness such as Solomon appreciated, when he said: "Better are the wounds of a friend than the kisses of an adversary."

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained, upon receipt of price, from the office of the REPORTER.]

THE RELATION OF ALIMENTATION AND DISEASE. By J. H. SALISBURY, A.M., M.D., LL.D., Member of the Philosophical Society of Great Britain, etc. Royal 8vo, pp. xi, 332. New York: T. H. Vail and Company, 1888.

One should treat with respect the utterances of a man who has carefully studied any subject for years, and who has come to entertain strong convictions in regard to it, even if one fails to recognize these convictions as correct. For this reason the book before us deserves careful consideration. It contains the conclusions reached by over thirty years of investigation of the most minute and laborious kind; and if these conclusions are not in accord with the opinions of most medical men, they are not to be dismissed with a sneer. We greatly fear that this will be their fate, however; for they are so extreme that they are sure to excite the criticism that the author has

followed the gleam of light which broke upon him, as he says, in the beginning of his studies, so exclusively that he has failed to see the countless other gleams which have fallen upon the world during their continuance.

The dominant idea of the book is that defective alimentation is the primary cause of almost all human ailments, and that proper alimentation is the cure for them. In a limited sense we think this is true; but we cannot follow Dr. Salisbury to his full conclusions.

Our limited space does not admit of a detailed analysis of his book, which we can commend as containing much food for thought. If it does not wholly convince the reader, it will furnish suggestions which will be of great value, and will certainly impress the reader with the industry and ingenuity of the author.

THE CUSTOMARY TREATMENT OF THE HAIR CONSIDERED IN RELATION TO THE REMARKABLE PREVALENCE OF PREMATURE BALDNESS IN THE UNITED STATES. (Author's name not given.) Duodecimo, pp. 20. St. Louis: Arthur R. Deacon, 1888.

The publisher of this monograph states that it is designed for popular reading, but the correctness of its claims and value of its teachings should first be determined by medical men. As having given some thought to the care of the hair, we take pleasure in commending this unpretentious little book to the attention of our readers. It bears hard, but not unjustly, upon the practice of barbers, and especially upon the process called "shampooing." This, we believe with the author, to be injurious to the hair and to be strongly deprecated. We do not share his opinion that cutting the hair short in summer is prejudicial to its health, or that it is advisable to apply oil habitually to the hair. But most of his opinions coincide so entirely with our own, that we think his book is a very sensible one.

CORRESPONDENCE.

Immediate Perineorrhaphy.

To the Editor.

Sir: I have just read an editorial in Medical and Surgical Reporter of June 9 on the subject of immediate perineorrhaphy. Like yourself I am surprised that anyone will delay so important an operation. Without going into details in regard to the pathology, treatment, and results of the accident, I will relate a few cases that have occurred within my obstetric experience of nearly twenty years in order to prove that immediate perineorrhaphy is the proper and only procedure worthy of practice and advocacy. My first case was that of Mrs. Claridez, a primipara. The rupture of the perineum was caused by the shoulders after a protracted unaided labor of twenty-four hours. Within one hour after the uterus was cleared of all detritus, etc., I proceeded to do up the rupture, which was a recto-vaginal one, with three deep silk sutures. After the sutures, I applied an ointment of vaseline and iodoform above the torn surfaces, rectal and vaginal. The ointment was applied every morning, after washing the parts well with carbolic acid soapsuds until the parts began to unite well, and then for a few days the parts were dusted once each day with bismuth subnitrate. In three weeks from the day she was ruptured, and at about the time for her to get up, she was well and sound. My second case was that of a young mulatto girl 13 years old when she was confined of her first child, weighing 10½ pounds. Rupture of the perineum occurred on the emergence of the head. Like the first case, it was a recto-vaginal rupture, and a deep one. Within two hours after the accident, I had the perineum well stitched together with three deep sutures, and the after-treatment was just like the first—the parts kept clean with carbolic acid soapsuds, and vaseline and iodoform ointment the first three or four days, and then dusting the surfaces once a day with bismuth. She recovered and was up all right in due time. My third case was that of Mrs. Cummins: first child; rupture of perineum by the shoulders. It was a partial rupture of rectum and vagina. As soon as she was cleared and rested, I sewed up the perineum with two superficial silk sutures, kept the parts well anointed with the vaseline and iodoform ointment for four or five days, and then began dusting the parts with bismuth as usual. This case, like the others, made a complete and rapid recovery in three weeks. My fourth case was that of a colored woman who had given birth to four children and was ruptured in her fifth confinement by an old midwife endeavoring to "turn a shoulder presentation into a head," as she called it. This rupture was a severe and extensive one, and had been done six hours before I saw it. I closed it up as I had all the other cases, and in three weeks she was ready to resume her usual household duties. And now to close my remarks, I will say that I never tied a knee or confined the legs in any way—simply directed the patients to keep their thighs together and to avoid spreading them apart as much as possible. In each case, as soon as they would come from under the effects of the chloroform given during the operation, I would give them a dose or two of powdered opium, enough to quiet them and hold the bowels in check two or three days; then I would order an enema of soapsuds and molasses to unload the bowels, after which I would give more opium and check the bowels two or three days more, then use the enema as before. In two of the cases,

I had to draw the urine the first two or three days, but no longer. These cases were not allowed to eat solid food of any kind for the first week, but were fed on soups, gruel, and milk. Each one of them, except the mulatto girl, has borne from two to four children since their respective ruptures without lacerating or in any way injuring their perineums. They are all alive, and are living willing witnesses to the success, propriety, and certainty of the immediate operation. I will do the immediate operation in every case coming under my care, regardless of what Fordyce Barker, Charpentier, or any other so-called luminary says. Common sense and every other reason all dictate an immediate operation. Were I disposed to do so, I could report several cases of ruptured perineums in the practice of neighboring physicians that were treated weeks and months after the accidents, which have never recovered right and properly, and never will.

If you wish to publish this do so, and if not, read it well and cast it aside. It is especially for you, and I hope it will afford you some encouragement to advocate the immediate operation of perineorrhaphy.

Yours truly, R. P. Davies, M.D.

Petty, Texas, June 20, 1888.

Notes and Comments.

Operation for Chronic Inflammation of the Spermatic Cord.

Dr. Horatio H. Johnson reports the following interesting case in the *Boston Med. and Surg. Journal*, May 24, 1888: Mr. P., seventy-five years old, a stout hardy farmer, seven years ago noticed a swelling in the groin, which he supposed to be a rupture, and, without any surgical advice, applied a home-made truss, which at times made him so sore, and gave him so much pain, that he would be obliged to discontinue its use; finally his condition became such that he sent for medical advice, and, the physician recognizing the necessity of surgical interference, on the following morning Dr. Johnson received a telegram to see the patient in consultation. There was found a hard unresisting swelling, extending from midway between the superior spinous process of the ilium and the symphysis pubis down to the testicle, which was considerably drawn up in the scrotum. The bowels had moved regularly each day unaided by laxatives, which led him to conclude it was not a hernia, though previous to his visit the patient had been etherized and taxis had been thoroughly tried. The case was diagnosticated as chronic inflammation of the spermatic cord, and it was deemed prudent to resort to surgical means for the patient's relief. Dr. Johnson removed five and one-half inches of the spermatic cord, with testicle attached, ligating above all signs of disease. The cord measured seven inches in circumference, and was well advanced toward suppuration. The patient was confined to his bed about five weeks, with very little rise in temperature or acceleration of the pulse, and the wound healed for the most part by first intention. The ligature on the pedicle remained twenty-five days. The patient is now about, and has made a complete recovery from the operation. Dr. Johnson regards the diseased mass as the result of continual irritation from the wooden pad worn for supposed rupture.

Phosphine.

At the meeting of the *Société de Thérapeutique*, of Paris, May 9, 1888, M. Dujardin-Beaumetz gave an account of experiments he had conducted in regard to the value of the dinitrate of diamidophenylacridine, or chrysaniline, known in commerce as "phosphine," as a substitute for antipyrine. This drug is a red powder, which, when dissolved in an alkaline liquid, gives it a phosphorescent appearance. M. Dujardin-Beaumetz administered the drug in a one per cent. solution in doses of from about seven to about fifteen grains. He found that the smaller dose produced distinct analgesic effects; but that when the larger dose was given it produced marked gastric disturbance. His conclusion is that phosphine cannot be admitted as a therapeutic agent, because of these disturbances.

Poisoning with Hydrochloric Acid.

M. Vaquez has made an autopsy on a patient who died three days after having taken six and one-half ounces of hydrochloric acid. The caustic passed into the air-passages, and there produced serious lesions of the trachea and bronchi, while the larynx remained almost unharmed. The cause of death was suppurative broncho-pneumonia. The tongue, pharynx, œsophagus were but slightly attacked, but there were profound lesions of the stomach. The intestine was healthy, showing that the poison had been retained in the stomach. This immunity of the intestines is very remarkable.—*Bulletin Médical*, May 20, 1888.

Suprapubic Lithotomy.

Dr. W. W. Keen, of Philadelphia, has lately removed a stone weighing ʒvii from a man's bladder, by suprapubic cystotomy, the operation being followed by an uninterrupted and rapid recovery.

Engraving of Dr. Cornelius R. Agnew.

At the last meeting of the Ophthalmological and Otological Section of the New York Academy of Medicine, it was resolved that a committee be appointed to obtain a good photograph of the late Dr. Cornelius R. Agnew, for the purpose of having engravings suitable for framing made from it. Members of the profession who desire such an engraving, accompanied by an autograph signature, should send their names and addresses to the Secretary of the Committee, Dr. Charles H May, 640 Madison Avenue, New York City, at once. When all names have been recorded, those who have requested a copy of the engraving will be notified of the cost of it, either by the publisher or by the committee having the matter in charge. It is understood that the engraving will be furnished at cost price.

China Grass, a New Antiseptic Surgical Dressing.

H. Bendelack Hewetson, in some remarks on China grass made before the Leeds and West Riding Medico-Chirurgical Society (*Lancet*, June 23, 1888), states that China grass is a soft, silky, very highly absorbent fibre used in various manufactures. The combings form an elastic silken wool, which, when treated with 4 per cent. of salicylic acid, makes an excellent antiseptic absorbent surgical dressing. It is also relatively much cheaper than, so far as Mr. Hewetson knows, any of the usual dressings used in surgery. Its chief value consists in the way in which it absorbs discharges from a wound, rendering it very dry, and preventing the poulticing of the wound, as it were, when the latter is bathed in discharges under less absorbent materials. A considerable quantity is required in cases in which the discharges are free, and it is perhaps well to interpose some open-meshed gauze between the dressing and the wound, so as to prevent the China grass from sticking to the wound when an attempt is made to remove the dressing. He states that he has also observed that, under the pressure of bandaging, the material still retains its absorbent qualities and does not cake when properly teased out before use.

Physiologists on Mont Blanc.

Three enterprising Frenchmen went last summer to the top of Mont Blanc for the purpose of making a series of meteorological and physiological observations, and remained there for two or three days in order to obviate the errors which, so far as physiological observations are concerned, would be inevitable if made while they were still suffering from the extreme fatigue incidental to so laborious an ascent. As it was, none of them had the courage, on attaining the goal, to put up the tent, etc., which, with great difficulty, had been brought up; and they fell asleep with their heads on the boxes of instruments. The thermometer, when placed on the snow, registered 19° C. below zero. M. Richard and one of the guides suffered from severe headache, with feverish symptoms. The least effort—even ordinary movement—caused such fatigue that they were compelled to lie down during the greater part of the day. They had masks to preserve the skin of the face from the biting cold, and the usual spectacles to avoid snow-blindness. The travelers suffered from almost complete anorexia, and they noticed that tea immediately made them ill. The second day, tracings were taken of the pulsation of the carotid and radial arteries. One of the guides was quite prostrated with headache and high fever, and was only got down with great difficulty. Once down, a good meal, a denser air, and a milder temperature soon restored them to their normal condition of health.—*British Med. Journal*, May 26, 1888.

Phenacetine.

Professor Rumpf, of Bonn, in a paper read before the Cologne Medical Society last month, gave his audience some account of his experience of phenacetine. The conclusions to which he came were that phenacetine is free from any unpleasant effects, and that it acts with remarkable certainty as an apyretic, the dose being for adults eight grains and for children from three to four grains. In doses of fifteen grains it is valuable in neuralgia (*a*) where the affection is due to vasomotor disturbance, (*b*) in the lancinating pains of tabes and neuralgia due to chronic neuritis, and (*c*) as a palliative in other forms of neuralgia. Being insoluble, phenacetine may be administered in capsules, or it may be placed dry on the tongue. Professor Rumpf has never found nausea, vomiting, failure of the heart's action, or cyanosis follow even fifteen grain doses.—*Lancet*, June 23, 1888.

NEWS.

—Dr. Egbert H. Grandin has resigned from the Department of Gynecology at the New York Polyclinic.

—The Lehigh Valley Medical Association will hold its eighth annual meeting at the Paxinosa Inn, near Easton, Pa., August 15.

—Dr. R. G. Penn, who was convicted of murder in Copiah County, Mississippi, five years ago, has been pardoned by Governor Lowrey.

—Dr. Abraham T. Lowe died at Ashburnham, Mass., July 4, at the great age of ninety-two years. He was graduated at Dartmouth College.

—The *Sacramento Med. Times*, July, 1888, states that a mild form of scarlet fever is at present to be found in a number of places in California.

—The physicians of St. Joseph's Hospital, Reading, Penna., have threatened to resign unless homœopathic treatment of patients be prohibited.

—Dispatches from New York state that a patient suffering with small-pox was landed at Sandy Hook from the White Star steamer "Celtic," and was subsequently taken to Elberon on the regular train.

—Typhoid fever is reported to be epidemic in Canton, Mass. There have been two deaths, and fifty cases are now under treatment. Cesspool drainage into a well is supposed to have caused the disease.

—A committee representing the Pennsylvania and Maryland Union Medical Society held a meeting at West Chester, July 6, for the purpose of arranging to hold the annual reunion of the Inter-State Association at Birmingham Park, on the Brandywine, August 30.

—It is stated that the towns on the upper Penobscot, Maine, are suffering from the ravages of caterpillars. In Chester, Maine, they have stripped the orchards and are now attacking the forests, and literally clearing the poplar and green hardwood trees of their foliage. Similar reports are said to come from other Maine towns.

—Governor Beaver, of Pennsylvania, has appointed James B. Scott, of Pittsburg, a member of the State Board of Charities, in place of Geter C. Shidle, who resigned. He has reappointed the following members of the Board whose terms had expired: George I. McLeod, M.D., and Thomas G. Morton, M.D., of Philadelphia, and J. W. C. McNeal, of Gettysburg.

—The celebrated ophthalmologist and physiologist, Professor F. C. Donders, of Utrecht, celebrated his seventieth birthday on May 28, in the presence of numerous scholars from all parts of Europe. Baron Roëll transferred to Dr. Donders 56,000 marks (about $14,000) which the latter has determined to use for the purpose of assisting students of high promise in pursuing their studies in ophthalmology and physiology in one of the universities of the Netherlands.

—As recorded some time since, the town of Bournemouth has laid down plants for the distribution of salt water for municipal purposes. These works were opened on May 15, and consist of two brick water-towers, with cast-iron tanks, having a capacity of 25,000 gallons each, of a total height of 58 and 55 feet respectively, the level at the top of the tank being 188 feet above sea-level, and about a mile distant from the sea; together with 57 hydrants, 57 water-posts, and 80 sluice-valves. There are about 6½ miles of 6-inch pipe, about seven miles of 4-inch pipe, and about 390 yards of 8-inch suction-pipe. The total cost of work is about $45,000, and they have a pumping capacity of 100,000 gallons per day. It is estimated that the cost per 1,000 gallons will be about threepence half-penny.—*Engineering and Building Record*, June 16, 1888.

HUMOR.

Little Emily—Do you like coffee, Mr. Watkins? Old Mr. Watkins—Certainly, dear. Little Emily—Well, you make such a noise swallowing, I thought perhaps it hurt you. Does it?

Patient (to young Sawbones, who is about to cut off his arm)—Do you think the operation will be successful, doctor? Young Sawbones—Of course it will; I'll have that arm off in less than ten minutes.

The latest bulletin.—Editor: "Where is the cable about the Emperor's health?" Assistant: "None came." Editor: "That so? How was he yesterday?" Assistant: "Worse." Editor: "Make him better to-day."—*Tid-Bits.*

A mistake in diagnosis. — "I find, madam," said a young physician, "that your husband is suffering from overwork." "And will he have to give up his place under the Government?" she asked, anxiously. "What's that? Is he a Government official?" "Yes, sir." "H–m! I'll diagnose his case again. He probably needs exercise."—*N. Y. Sun.*

OBITUARY.

A. Y. P. GARNETT, M.D.

Dr. A. Y. P. Garnett died on the night of July 11, of heart-failure, at Rehoboth Beach, Delaware. He was born in Virginia in 1820, was graduated from the University of Pennsylvania in 1841, entered the United States Navy as assistant surgeon the same year, was promoted surgeon in 1848, and resigned in 1850 in order to accept the Professorship of Clinical Medicine in the National Medical College of Washington. At the breaking-out of the rebellion, he left Washington and became Surgeon General of the Confederate Army. When the war was over, he returned to Washington and was again elected a Professor in the National Medical College. He served as President of the American Medical Association at its last meeting. He contributed many valuable papers to medical literature, the last being the Presidential Address before the American Medical Association, in which he spoke very earnestly in favor of elevating the standard of medical education in the United States.

JOHN LIVINGSTON LUDLOW, M.D.

Dr. J. L. Ludlow, one of the most widely-known physicians of Philadelphia, died June 21, 1888, in the sixty-ninth year of his age. His death was caused by prostration. He had been gradually failing in health since March, and for the past six weeks had been confined to his home.

Dr. Ludlow was born at New Brunswick, N. J. He passed his early boyhood in Albany, and, when fourteen years old, came to this city with his father, who in 1834 was elected Provost of the University of Pennsylvania, and who occupied this position for eighteen years. Dr. Ludlow was graduated at the University with honor in 1838, and afterwards studied medicine, finishing his medical course at the same institution in 1841.

During his long career as a practitioner, he occupied many positions of influence and honor. He was for thirty years one of the visiting physicians to the Philadelphia Hospital, and last year, when he retired from this position, had conferred upon him the honorary title of Emeritus Physician. At the time of the organization of the Presbyterian Hospital, he was elected a visiting physician and served until his death.

Dr. Ludlow was a Fellow of the College of Physicians of Philadelphia, and a member of the State and County Medical Societies, as well as of a number of other societies. Dr. Ludlow was an earnest and conscientious man and a devoted physician. His scientific ideas were largely those of the last generation, and he regarded with some distrust a number of the changes in opinion which have taken place during the last two or three decades. He was a man of warm heart, and enjoyed the regard of old and young alike in the profession. He was especially kind to his juniors, and those who served as resident physicians in the Philadelphia Hospital while he was connected with it were always sure of his sympathy and aid in any trying circumstances, and they especially will cherish his memory with affection and gratitude.

DR. RACHEL L. BODLEY—Resolutions.

At a meeting of the Faculty of the Woman's Medical College of Pennsylvania, held June 20, 1888, the following action was taken on behalf of the death of Professor Bodley:

Whereas, Our honored Dean and Professor of Chemistry, Rachel L. Bodley, has been suddenly removed by the hand of death from the arena of earthly activities, in so many of which she was deeply interested—

Resolved, That we, her colleagues in the Faculty of the Woman's Medical College of Pennsylvania, recognize in the removal of our senior member the loss of one most familiar with the historical and traditional features of our college and its past work.

She was thoroughly acquainted with the arduous duties of Dean, which she performed most ably and acceptably, and in which her wise administration secured for the college friends wheresoever her influence was exerted.

She was keenly alive to the personal as well as educational requirements of the students, so many of whom, coming as strangers from far distant lands, found in her a friend earnestly solicitous for their welfare, and ever ready to do all in her power to further their interests.

She was an able teacher of chemistry, striving successfully by word and illustration to elucidate the intricate problems of her branch.

Religiously devout, she at once placed before those with whom she came in contact a high standard socially and morally, and did much to establish the same for the college, to the services of which her efforts and indeed her life were so ungrudgingly, unsparingly, and unceasingly devoted.

Possessing an acquaintance among peoples in all lands through her college relations and affiliations, her usefulness to us and to the world can scarcely be overestimated, so varied and extensive had it become.

As a friend, she was ever genial, kindly, and courteous, and we shall greatly miss her quiet dignity in our Faculty meetings. In the entire round of college work, with the extensive ramifications of which she was so thoroughly familiar, we feel our loss to be almost irreparable.

Resolved, That these resolutions be spread on the minutes of the Faculty, and a copy of them be sent to her aged mother.

THE

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Clinical Lecture.

HYSTERIA AND SPIRITISM.[1]

BY PROFESSOR J. M. CHARCOT,

PROFESSOR OF THE FACULTY OF MEDICINE, PHYSICIAN TO THE SALPÊTRIÈRE, ETC., ETC., PARIS, FRANCE.

Gentlemen: It is incontestable that everything which vividly affects the mind, everything which powerfully stimulates the imagination, favors the development of hysteria in persons predisposed thereto. Of all causes productive of these traumatisms of the cerebral functions, there is perhaps none more efficacious, and whose influence has been oftener acknowledged, than inordinate belief in the marvelous, in the supernatural, a belief which is fostered and exaggerated by excessive religious observances or—to descend to a kindred order of ideas—by spiritualism and its practices. It is sufficient to recall to mind certain facts which are matters of history, such as that of the "Possessed Maiden of Louvres" in the sixteenth century, whose imagination had been kept in constant tension, before her "possession," by the lost spirit which reappeared every night in the house where she lived;[2] and there is a recent interesting instance of an epidemic of hysteria affecting six children of one family in Brétagne whose minds had been fed with fantastic stories in which witches and ghosts played the principal part.

[1] Advance sheets of a new volume about to appear from the press of G. S. Davis, with the sanction of the professor. Translated by E. P. Hurd, M.D.

[2] Procès verbal fait pour delivrer une fille possédée par le malin esprit à Louviers, 1591. Bibliotheque diabolique, 1883.

It has been my lot to observe one of these little family epidemics, the principal actors in which I am going to present to you to-day. This epidemic merits a particular description, as much with reference to its mode of development as for the light which it gives in the study of hysteria in children, and particularly in young boys. It is in a military penitentiary that the facts occurred which I am going to relate.

Life in a penitentiary must be dreary enough at the best; moreover, by reason of the discipline which must necessarily prevail in such institutions, even the apartments of the military keepers cannot but partake of the gloom and severity of the place. The lodgings occupied by Monsieur X., adjunct lieutenant, are situated on the third floor; access thereto is obtained by a dark stairway; the apartment itself is insufficiently lighted, for all the windows, which look out upon the prison yard—which, it is true, is a spacious one—are situated high up, near the ceiling, and admit but little light. Monsieur X., who has lived in the penitentiary three years and a half, is forty-three years of age; he seems to be quite intelligent, although his military career has been one of slow and moderate advancement; I shall say more about his mental state presently. His general health is good, and there are few pathological antecedents on his side. At the age of thirteen, he suffered from an affection which was febrile at its commencement, but was followed by a delirious state which lasted six months.

Madam X., aged thirty-six years, and married since 1879, is a very nervous woman; she is quick-tempered, emotional, and fretful; has, however, never had convulsive attacks of any sort. It is not so,

however, with her mother, who died in March, 1884, at the age of seventy-two years, of a cerebro-spinal affection, and who every year had two or three returns of well-marked hysterical fits. We may note, finally, that her father was a constant sufferer from rheumatism.

Monsieur and Madam X. have had four children; three are still living; the fourth died, probably of athrepsia, at the age of two and one-half years.

You see before you the oldest of the three living children—Julie, aged thirteen and one-half years; she was born before full term—at seven and one-half months—and she remained a long time weak and puny, having been brought up on a bottle. For the last three years, she has been boarding at a convent in the neighborhood of the penitentiary. From her infancy, she has been very nervous. At the convent, as at home, she has been unruly and difficult of management, laughing and crying for the most trifling cause. In 1883, she menstruated for the first time; these first monthly periods were accompanied by violent cramps; menstruation then ceased, and has not since returned. Every year, she comes home to spend her vacations with her parents at the penitentiary. It is proper to state that, prior to the events I am about to relate, she had never witnessed any convulsive crises.

I also bring before you the younger of the boys, François, aged eleven years, who is pale and anæmic like his sister. At the age of four months, he had convulsions, and from the time that he was two years old he suffered from pains in the joints of the lower extremities, knees and feet. These pains, which have lately returned on various occasions, are sufficiently severe to keep him in bed. He takes his meals at a boarding-house near the penitentiary, and comes home at night to sleep.

Jacques, the elder of the boys, aged 12 years, also anæmic, shares his brother's mode of life. For several years, he has had convulsive tics, affecting chiefly the mouth, as you can yourselves see. During the month of August last, the entire family were home passing the holidays together—the father and mother busy with their usual occupations, the children playing together in the yard of the penitentiary, almost always alone, for belonging to the families of the other officers there was only one child, four years of age. Life in a house of correction must, as I have before said, be very tiresome: apart from the regular routine, there is little in the way of diversion; hence, in order to break this monotony, the wives of the prison-officers had been in the habit now for more than a year of devoting themselves with passionate interest to spiritualistic practices, holding séances which were conducted every other day by a female friend of one of them. This diversion was very much to their taste; in fact, they all became pronounced spiritualists, and none more so than Monsieur and Madam X. The latter, moreover, applied herself eagerly to the reading of books treating of "occult sciences," books which she did not hesitate to allow her daughter to read. As for Monsieur X.—who had at first been quite indifferent to spiritualism—since the month of March, 1883, he never missed taking part in table-tipping on Fridays, it having been revealed to him by raps one day that on some Friday he would become a medium and have the power to call up the spirit of his mother. So it happened that Julie was present at a spiritualistic séance during the Easter holidays; this did not, however, much affect her. Coming home during the August vacation, she had already participated in several "circles," in which, however, she had had no part except to lay her hands upon the table; but on Friday, the 29th, her father made another attempt to find if his turn for being medium had not come. He interrogated the table, and the latter, instead of designating him, as he hoped it would, replied by raps: "Julie shall be medium." The whole of Friday was devoted to a séance which was almost uninterrupted. The next day, at nine o'clock in the morning, the family and two or three neighbors again formed a circle. They called up the spirits of various persons, and, about three o'clock in the afternoon, the table rapped an order for Julie to write. She thereupon seized a pencil, but the same moment her arms became stiff and her eyes fixed. The father, in his fright, threw a glass of water in her face. She came to herself, but her mother, having a presentiment of the danger, forbade her to have anything more to do with table-tipping. She did not, however, realize the influence of her neighbor whose friend was a medium, and attended the séance in her company. This neighbor, desirous of communicating with the spirit of her sister, took Julie home with her, and the séance recommenced. About seven o'clock, the table tipped, the spirit was declared present, and Julie said to it: "Please to sign your name." Immediately, she herself, in her quality of medium and "under the inspiration of the spirit," seized a pencil with trembling hand and

wrote "Paul Denis" with a flourish. The handwriting was that of a man; the P and D, moreover, were written in such odd characters that the young girl has never since then been able to trace letters like them. The signature was no sooner terminated than the hand that had written it was convulsed. Then Julie, with a shrill laugh, rose immediately, and, like one mad, in wild delirium ran back and forth through the house, uttering inarticulate cries, then rolled over and over on the floor, presenting a series of hysterical paroxysms characterized chiefly by contortions (clonism). The next day and the following days, the fits reappeared very often—twenty to thirty a day. So affairs went on till the fifteenth of November, Julie continuing to have convulsive crises and being little benefited by the application of divers means, and, in particular, of hydrotherapy.

Several days previously, François, the younger of the boys, who, like his brother, always took a great interest in spiritualistic performances, was attacked with pains in the joints, which, at that time, kept him in bed. All at once, on the 15th of October, he rose in bed and exclaimed that he saw lions, wolves; then he leaped out of bed, pounded the doors, declared that he saw his father a corpse, that he saw robbers, whom he attacked with a short sword; then he lay down and rolled on the floor, crept on his belly, and assumed certain well characterized passional attitudes. Two days later, Jacques had an aggravation of his facial tics; then, seeing his mother weeping, he exclaimed: "I will kill myself if you weep!" Then attacks of temporary delirium came on, during which he muttered incoherent phrases and saw robbers and assassins, whom he tried to strike.

It was on the 9th of December that the father and mother, in their affliction—all treatment having been without avail—brought their children to the Salpêtrière. Separation and isolation were becoming more and more necessary, for, when one of the children had a fit, the others speedily followed the example.

Julie, whose pathological antecedents you now know, and whose age is thirteen and a half years, is tall and stout for her age, quite well developed, although, as I told you, her courses, which came on once or twice in 1883, have not yet been permanently established. Despite of what her mother has informed us, she seems to be of a mild and quiet disposition. On the first day of her entrance, as well as on the subsequent days, she had several fits which were in general characterized as follows: All at once, sometimes after a brief and variable *aura*, she fell backward, the arms were separated from the trunk, the hands being in pronation, the fingers clinched. Then quite frequently supervened one or more attacks characterized by a unilateral arching of the body; and lastly the clonic phase presented itself, in which the body was jerked back and forth, the head at times was almost brought in contact with the pelvis, or the arms were projected violently in the air, the head still resting on the pillow. During the attack, Julie uttered moans, had fits of laughter, but did not speak. The fit, which was composed of a series of seizures similar to what I have described, lasted quite a long time—three-quarters of an hour, an hour, or an hour and a half. It was easy to stop or provoke a fit at will by pressing on one of the hysterogenous points which the patient presented. Julie, in fact, possesses certain permanent hysterical stigmata; although she has neither cutaneous anæsthesia nor ovaria [ovarialgia], she has numerous hysterogenous zones, situated opposite each other, on the two breasts, on both flanks (externally), on both calves, and the two external malleoli, and on the internal aspect of the right elbow joint. The examination of the eyes, made by M. Parinaud, gives results which are characteristic. There exists, in fact, on the right, a very marked contraction of the visual field; moreover, not only is the circle of red situated outside of the circle of blue, but it even plainly extends outside of that of the white light. The same phenomena exist on the left side, though less pronounced. The other special senses are intact.

François, the youngest of the boys, aged eleven years, has also certain permanent stigmata apart from the seizures which I have just described. Thus, on the morning of his admission, we noted an area of anæsthesia embracing the whole face; this patch was, however, variable, for the following days the insensibility was limited to the median region of the forehead and nose. The rest of the external integument is notably hyperæsthetic. All the special senses are affected; the taste is totally abolished, the insensibility of the tongue is complete, the pharyngeal reflex no longer exists, the pituitary membrane and the smell are in similar condition, the external auditory meatus is insensible, and hearing is very obtuse. The examination of the visual field is also very demonstrative; the contraction is quite marked on the left, and not only is the

circle of red outside of the blue, but it also extends beyond the circle of white light. On the right, the contraction is less marked, and there is no transposition of colors. François has from one to five fits every day; some of them last two hours. He presents clearly the phenomena of minor and major hysteria (*petit* and *grand mal hysterique*). The first, or minor hysteria, is characterized by a contracture of the orbiculares of both eyes, which may last from three to five minutes without loss of consciousness; or another symptom referable to the *petit mal* may present itself: the boy smites with his fists or stamps with his foot, and pronounces certain incoherent words, and all is over. But generally the preceding phenomena are followed by a series of characteristic paroxysms constituting a fit. The upper and lower limbs become rigid, the eyes are closed, the body is stiffly bent into a bow. Then the boy throws himself upon the floor, creeps on his belly, smites the floor, crying out at the assassin of his hallucination; he struggles and kicks and endeavors to defend himself against his imaginary foes. The tonic phase is now repeated, and the fit is thus constituted by a series of accessions, one set of phenomena running into another or predominating over the others. It is a remarkable circumstance that, when you compress the left hand, the fingers of which are extended, you arrest the paroxysm instantly. You cannot, however, provoke an attack in this way. The skin over this region does not present any disorder of the sensibility.

Jacques, aged twelve years, pale and anæmic like his brother and sister, is the least sick of the three, though he has one, two, and sometimes three or four attacks every day. While there are not, in his case, any permanent stigmata, there is a marked preponderance of the *petit mal* over the *grand mal*. We know that, before these fits came on, he had convulsive tics of the face; these are now exaggerated, especially at the beginning of the seizure. He makes wry faces, the labial commissures are drawn outwardly; he mumbles, closes his eyes, utters certain incoherent words, and all may be over. But sometimes, as a sequel of these phenomena, or even at the outset, the eyes close, the body stiffens, is arched like a bow, then the child starts and runs or walks to and fro, speaks in a loud tone of voice, cries out at some imaginary thief, and finally throws himself on his bed, when the fit ends, or another one begins, lasting rarely longer than a quarter of an hour.

These facts have seemed to me to merit a particular attention. These are not, in truth, fugacious symptoms of hysteria which these children present. Julie has been sick for four months, and, if the isolation seems to have somewhat calmed her crises, as well as those of her brothers, it is no less true that the fits threaten to continue yet a long time, for you cannot bring together these children without all three of them immediately having a convulsion. The whole history of this little family epidemic is, moreover, very instructive. It makes you a witness of the genesis and evolution of the disease in a family of nervous and arthritic persons under the domination of two diatheses whose alliance is a most fruitful source of neuropathy. It gives you an idea of the influence exercised by the kind of life one leads and the conditions of habitation. Lastly, it indicates clearly the danger there is, especially to persons nervously predisposed, in superstitious practices, which unfortunately have for them so great an attraction, and in that constant tension of mind and imagination to which those are brought who apply themselves to spiritistic performances and the search of the marvelous, an occupation in which children take so much delight.

COMMUNICATIONS.

RESPIRATION EXERCISES; RELATING TO THE DEVELOPMENT OF THE CHEST CAPACITY AND MUSCLES OF RESPIRATION.

BY A. H. P. LEUF, M.D.,

DIRECTOR OF PHYSICAL EDUCATION AT THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA.

The function of respiration has for its main object the abstraction of oxygen from the air and the exhalation of carbonic oxide from the blood. To this end there are necessary blood and air in constantly moving currents, and almost in contact. Any imperfect interchange of oxygen and carbonic oxide causes a sensation of suffocation, which increases in proportion as the process is incomplete. The inadequacy of oxygenation may depend upon a retardation or suppression of either of these currents. If the air supply is defective, it is because of insufficient chest capacity due to weak muscles, or an inelastic chest, or inability to use properly the respiratory muscles. Of course no account is now taken of advanced lung disease or of either internal or external

mechanical obstruction of the air-passages. If, on the other hand, the blood supply is defective, the cause is in the circulatory apparatus, and, as a rule, mainly in the weakness of the heart. That both of these shortcomings may be rectified in most instances can not admit of a reasonable doubt. In this paper, I shall confine myself to exercises relating to the chest and lungs and the circulating air.

Of all the books issued on gymnastics most are good; I may say very good; but, from the view of the athlete mainly. Their scientific value from a medical standpoint does not meet a critical requirement. All the writers I have seen have a crude notion of myodynamics, and yet even one of these, in a recent work, tells of his astonishment at having noticed that remarkably few physicians are even as well versed as he on this subject. Let me say at once that the knowledge of myodynamics usually possessed by even well informed physicians, and by those undergraduates well known to their teachers for their acquaintance with anatomy, by no means gives the same facility of analyzing complex muscular actions as practical anatomists have. From this point of difference arises a defect that is so serious as to endanger many lives. When a man begins the practice of medicine, he should be qualified to do his work, and if he is conscientious and modest, he will not jeopardize a trusting patient's life when he is not certain of his own ability to diagnose and treat the disease. So *should* it be in the prescribing of exercises for either well or unwell people of any age or either sex.

The average physical educationist, and some of them are medical men it must be said, see no other cause for "short-windedness" than insufficient chest capacity and weak pectoral muscles. The heart is practically ignored as a cause of dyspnœa. All advice tends to the development of the chest girth and chest capacity. The patient must learn to blow better and must get larger pectorals. This is the cure (?) and if it does not succeed, the case is usually considered insurmountable.

Again, no difference seems to be made by anybody as to the intra-thoracic pressure during different exercises. It has lately become the fashion to incline toward athleticism. In fact there are "schools" or "systems" of athletics. Some of these are —well, absurd. The motives of the originators I believe to be honest, but the effects are detrimental. One such system favored by a growing number, and undoubtedly good if properly used, is that which is so simply and perspicuously outlined by Mr. Blakie in his little school manual. Its principle is very light work, slow movements and intermediate rests, associated with long, slow, and deep breaths that are held for several seconds. It is against the indiscriminate use of these that I would raise a warning cry.

Some of these "mild" (?) exercises cause not only an enormous increase of the intra-thoracic pressure, but also of the pressure in the veins of the head and neck. The danger is evident. It may affect the heart, but of this in another note. It may affect the lungs beneficially or detrimentally; beneficially if it is desirable to force the air into all parts of the alveoli and cells under considerably increased pressure, and detrimentally under other circumstances as tending to pulmonary anæmia, atrophy of the alveolar walls and eventually emphysema. It may cause a rupture of the vessels of the inside or outside of the head, but especially of those small delicate ones of the brain that are found within the internal capsule. I could mention instances where I feel certain that lives were lost because of well meant, but wrong and carelessly given, advice about exercise, while others are now ebbing away at a quicker rate than was indicated previous to the beginning of gymnastics.

A remedy that so taxes the powers and is so potent for good should be most carefully employed. Many consider the lighter gymnastic performances innocent, but a personal trial by one who is weak and follows instructions to the letter will develop the fact that the remedy is often heroic.

The author of a recent book on this subject, and he is not a physician with a degree, describes a certain exercise for "broadening the chest,"[1] which has little or no effect whatever on the chest capacity, but increases the girth of the chest only by enlarging certain muscles, besides increasing the size of the ribs at the site of muscular attachments. He figures upon the contraction of the pectoralis major in this movement and so far he is right, but he forgets that other muscles take part in the work, one of the most important being the serratus magnus, which antagonizes the pectoralis major, in the exercise advocated, by pulling downward and backward upon the ribs while the

[1] This motion is done with the pulley weights. The back is toward the machine and the hands are held above the head. They are then brought downward, forward, and inward to a point on the median line, a little below the pelvis.

other pulls upward and backward. The serratus acts to hold the shoulder forward in this exercise. A deep breath is taken before the motion is begun and the consequence is that the imprisoned air is compressed, the pulmonary circulation is impeded, and the nourishment of the lungs diminishes for the time being. Sometimes this may be desirable and at'other times not. Only a competent physician can judge which is requisite.

I would lay down as a safe rule that *very few exercises expand the chest that call into direct action the pectoralis major muscles.* All such tend to compress the chest. Actual measurement with the calipers and tape demonstrates this to be a fact.

Another movement with the pulley-weight, illustrated by Fig. 1, in which the arms are brought forward with the elbows extended, while the back is toward the machine, causes a strong direct contraction of the pectorals, and is generally said to expand the chest; but, instead, it compresses the chest.

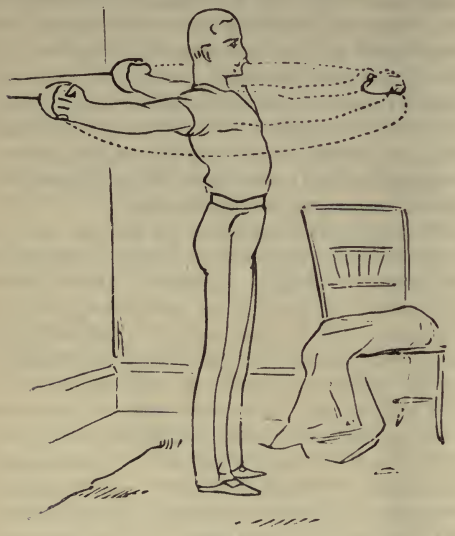

Fig. 1.

Fig. 1 compresses the chest, but exercises principally the pectoralis major or great chest-muscle of each side. This leads to a marked increase in the size of the chest-muscles and outside girth of chest, and is a good preliminary for those learning to dip.

Dipping is also considered a good exercise for causing chest expansion, but it, too, compresses. The same is true of all exercises that forcibly contract the pectorals and cause a movement of the arm. Contract these muscles, though, while the arms are firmly fixed forward, and it is, of course, evident that there is a greater tendency to chest expansion than when the arms move; hence the attitude of the asthmatic, with arms braced forward on a window-sill during a paroxysm.

The exercises that have thus far been enumerated are generally said to be respiratory, but really are chest-compressing exercises. The following are a few that are truly respiratory. By that I mean such as cause an expansion of the chest and a diminished intra-thoracic pressure, thus causing an active and almost irresistible inspiration. Such are the movements shown in the following figures:

In the instance of Fig. 2, the lower part of the chest is forced out very appreciably, the expansion involving the entire chest up to the clavicles. With the hands held at full reach above the head by the pulley-weight,

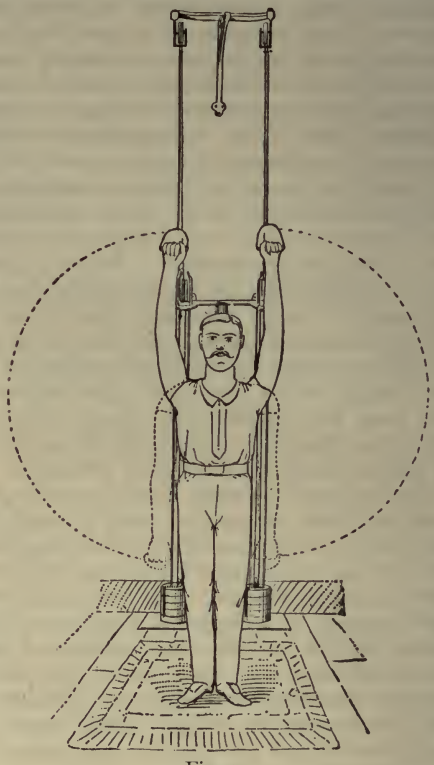

Fig. 2.

and without any effort by the patient, a long deep breath just before the exercise comes as natural, and is as pleasant, as the enjoyable morning stretch upon rising; then the arms are brought down slowly to the sides of the thighs, while the air remains in the lungs. The quickness of the movement should depend largely upon the temperament and condition of the patient. Expiration may take place at the end of the downward movement.

Fig. 2 exercises the front and back of the deltoid, pectoralis major, latissimus dorsi, teres major, and serratus magnus.

This motion strengthens the front and back arm-pit muscles and the chest-muscles, besides expanding the chest, causing it to flare out at its lower part—a good movement for narrow-chested persons and those desiring to become "long-winded" for long-distance running. The elbow must be kept stiff, while the downward motion should be accompanied by a deep inspiration and the upward movement by expiration. It is one of the very best respiratory exercises.

The exercise shown in Fig. 3 increases to a remarkable degree the antero-posterior diameter of the chest. The same motion in a standing posture would partly compress the chest, because of the counteraction of the serratus magnus in keeping the scapula, shoulder, and upper end of the humerus forward. Resting the back upon the floor dispenses with the action of the serratus magnus, and hence the difference in the effect of the same exercise done under changed conditions.

Fig. 3.

Fig. 3 exercises the biceps slightly, belly, pectoralis major, lattissimus dorsi, deltoid, teres major, rhomboidii, and trapezius.

The front of the upper arm, the belly, front of the chest, side of the back, the shoulder, back of arm-pit, and the upper part of the back. One of the very best motions for increasing the depth of the chest. As the arms come up, with the elbows stiff, the chest is seen to rise until it reaches its limit of expansion. This, with the motions shown in Figs. 4 and 2, constitute a fine combination of exercises for expanding the chest.

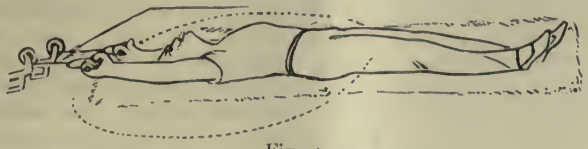

Fig. 4.

Fig. 4 exercises the biceps slightly, pectoralis major, lattissimus dorsi, teres major, and trapezius.

The front of the upper arm, the front of the chest, the side of the back, back of the arm-pit, and the upper part of the back. This is essentially the same as Fig. 2, except that it is somewhat easier, and the hand, being on the ground, insures a steady motion of the two sides on the same plane. It is a good exercise, if one begins to feel tired, or for those who are too weak to do it standing, as in Fig. 2.

Fig. 4 shows a movement essentially the same as that shown by Fig. 2, but is better for weak patients, as they then exercise only those muscles necessary to inspiration and expansion, and avoid the tiring effects of using the other necessary muscles while standing.

In conclusion, then, of the so-called respiratory exercises, some expand and others compress the chest. It may be desirable sometimes to produce one of these effects and at other times the other effect. Both have their uses, especially in supplementing the pneumatic cabinet. Will Drs. Herbert F. Williams and Benjamin F. Westbrook, of Brooklyn, work up this suggestion in connection with their cabinet patients? For increasing the intra-thoracic pressure, employ, for instance, the exercises shown in Fig. 1, and to diminish this pressure employ those shown in Figs. 2, 3, and 4.

The movements for changing the intra-thoracic pressure may be multiplied, but to state these is not my object at present. This note serves mainly to point a way. Details must be left to circumstances, as, for instance, mechanical facilities for exercise (apparatus, etc.), anatomical knowledge of the prescribing physician, and his mechanical ingenuity. Care must be taken to begin gradually and with very light work. It takes but little work to cause soreness the next day, and this must be carefully avoided in sick and feeble persons.

It must not be forgotten—as is so commonly done—that chest-girth is no reliable index of lung capacity, because large pectorals, especially while contracted, make a difference of several inches as compared with the girth of a chest just as large in a person with very thin and flabby pectorals; in fact, I have satisfied myself in several instances that increased girth of chest was accompanied by actual contraction of the chest itself. In these instances, the increase was due to muscular development.

My next paper will deal with the heart in relation to "shortness of breath," and the remedy.

129 S. Thirty-sixth Street.

CORNEAL TRANSPLANTATION.

BY L. WEBSTER FOX., M.D.,
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In engrafting the cornea of the rabbit into that of the living subject with preservation of transparency of corneal tissue, Professor Von Hippel has achieved results little dreamed of by Deiffenbach, who in 1824 first experimented unsuccessfully in transplanting sections of cornea in rabbits. In THE MEDICAL AND SURGICAL REPORTER, October 11, 1887, a letter is published in which the writer gives the details of Von Hippel's now celebrated operation, having had the opportunity of making a thorough examination of his patient nearly a year after he performed the operation. Without going into a history of keratoplasty, which has been exhaustively reviewed by Dr. August Wagermann, of Göttingen, in *Graefe's Archives*, vol. XXXIV, bd. 1, 1888, I will at once give the history of a case, the details of the operation, and the result of that operation.

Mrs. Mathilda Schick, age nineteen, of 474 North Fourth Street, Philadelphia, came under my observation in January of this year, suffering with opacities of both corneæ: sequelæ of a pronounced keratitis. In the right eye, the parenchymatous opacities extended throughout the entire corneal tissue to within one mm. of the corneo-scleral margin—its greatest density being in the centre opposite the pupil. Vision, *nil;* light perception and projection good, but movements of the hand not recognized. The left eye was in like manner affected, but the corneal infiltration was not so dense, nor as extended. The vision in this eye was practically useless.

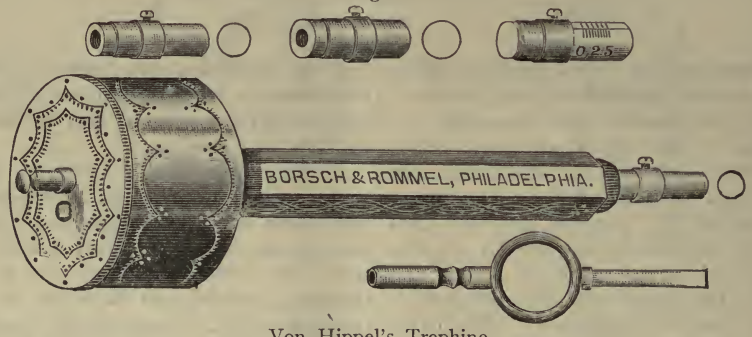
The general history of the case prior to the attack of keratitis which resulted in the loss of vision is irrelevant; she enjoyed good health, and was free from hereditary taint.

DETAILS OF THE OPERATION:

Anticipating a major operation on an eye, the patient is placed on preliminary treatment, which consists of doses of hydrarg. bichlorid. just beyond its tonic effect. The nasal passages are examined, and antiseptic precautions are always instituted.

Professor Von Hippel's trephine is a very simple but ingenious instrument. The trephine is driven by a spring which is allowed to escape by gently pressing a small button placed in a convenient position on the top of the case enclosing the spring movement. The trephine is screwed to a bar which is attached to the spring lever—this is enclosed. The circular knife or trephine has its cutting edge guarded by a circular band or collar which graduates its cutting depth. The spring is wound by a key.

Fig. 1.



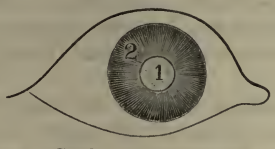
Von Hippel's Trephine.

The eye of the patient is thoroughly cocainized, and the eyelids separated with an ophthalmostat. The cutting edge of the trephine is then brought in juxtaposition

with the cornea, perpendicular to its plane, the button on the top of the instrument touched, allowing the escapement of the spring which drives the trephine, making a circular incision to the necessary depth. After the circular incision is made, comes the most important step in the operation, *i.e.*, the dissection of the leucomatous tissue from the membrane of Descemet. This is done by grasping the inner lip of the incised tissue with a delicate forceps, then with great care and delicacy of touch removing the obstructing tissue. A knife shaped after Beer's model was the best instrument which suggested itself after many trials in preliminary experiments.

The rabbit selected from which to obtain the graft is usually about six months old. Von Hippel usually selects a doe. The eye of the rabbit, which is now under cocaine, is thoroughly washed with an antiseptic fluid, the eyelids separated by a speculum, and the eye-ball drawn forward by an assistant. Two strabismus-hooks, inserted under the superior and inferior recti muscles, answer best. By

Fig. 2.



1. Graft. 2. Cornea.

drawing the globe forward, the trephine may be guarded more carefully in its incision, which is made through cornea and Descemet's membrane. The graft is then inserted in the cornea of the patient, being pushed into place by a delicate wire probe passing through the trephine. After the graft is fixed firmly in place, the upper eyelid is drawn forward and downward, all being securely held in place by a pressure bandage, delicately adjusted. After three days, the bandages are removed and the eye examined.

In the case now reported, the graft was slightly hazy at this time, which Von Hippel finds to be the rule; while, if the edges of the graft have remained in place, growth will take place.

From day to day, the eye was carefully examined. After the sixth day, there was no change in the slightly hazy condition of the graft; but, as anticipated, the cornea surrounding the graft from the first day of examination (third after the operation) took upon itself healthy inflammation, thereby giving nourishment to the graft. Very little pain followed the operation, and at no subsequent time was it found necessary to give an opiate. There was no rise in temperature. The process of healing was uninterrupted.

But once up to present writing has there been any untoward symptom—then, owing to a nervous shock, a sudden keratitis developed, which was promptly checked by antiphlogistic measures administered by my friend, Dr. Heyl, who was called in consultation by my assistant, Dr. Motter, during my absence from the city at that time.

The operation was performed at the Germantown Hospital, April 29, 1888, in presence of the hospital staff.

At present writing, July 2, the case presents the following conditions. Right eye: Union of graft perfect, its integrity preserved, and covered with corneal epithelium; transparency of graft progressing—central vision increased to counting fingers to four

Fig. 3.

1. Descemet's membrane. 2. Cornea.

feet; able to attend to personal wants and go about alone in safety; color-perception keen. The restoration of transparency in the graft has not been general, but stellate, *i.e.*, certain segments began clearing; the centre of the graft is the last to show improvement. In looking across the apex of the cornea, one is able to look into the transplanted tissue, proving a clearing down to the middle layers of the graft. If this process of change continue—and we have every reason to believe it will—we shall have the same result that Von Hippel obtained. The cornea surrounding the graft has recently begun to clear, which may become more and more extended, leaving only a narrow circle of connective tissue between graft and cornea.

To Drs. Kimmell and Cameron, house surgeons at the hospital, I am indebted for their valuable assistance at the operation, and the subsequent attention they gave the patient in carrying out the tedious details of the after-treatment.

In the *Ophthalmic Review* for June, just received, I find Priestley Smith publishes an abstract of the article of Wagermann mentioned above. To physicians who are not conversant with the German language, and who wish to obtain the fullest and clearest description of Von Hippel's experiments yet published, I would recommend the abstract of Priestley.

1304 Walnut St.

TREATMENT OF SNAKE-BITES.

BY WILLIAM R. D. BLACKWOOD, M.D.,
PHILADELPHIA.

In an editorial in the REPORTER for June 9, reference is made to the treatment by alcohol of snake-bites, in which it is stated that "profound and continued intoxication" was instituted in a New York hospital, and reference was also made to the use of permanganate of potassium in the lesion considered. During my service in the army after the war—and in two cases during the war—I had an unusual number of snake-bites to treat, and I have further hunted up all available records upon which reliance could safely be placed. The result of my studies is that alcohol *is* a certain antidote, and that the so-called chemical antidotes are of *no service whatever!* Of all remedies, the permanganate appears to be the poorest. I believe it criminal to trifle with life when a rattlesnake or a cotton-mouth has done the business for the patient, for the administration of either that or ammonia simply wastes valuable time. Everything depends on getting the patient under the influence of alcohol at the earliest possible moment, but intoxication *is to be avoided* in my opinion.

In my own cases, the pulse was the guide—when it flagged, alcohol was given in a dose sufficient to bring it up, and, the sooner the case was taken in hand, the less the dose. I generally used "apple-jack," because in Alabama and Georgia, where most of the cases occurred, that beverage was most readily accessible; and it was, moreover, a better article than new whiskey, which, not being rectified or tinkered with *secundum artem* by the trade, contained too much fusel oil to be good for the patient in his convalescence. In saying this, I do not mean that he had to go through the usual nausea and headache succeeding a debauch, for in my cases the sufferer could not, in strict language, be said to be drunk at any time; but those physicians who know the effect of large doses of raw corn whiskey can testify to the wretched disturbance of the nervous system due to the amylic alcohol therein contained. I was at a loss, for a time, in accounting for the frequent convulsions amongst soldiers during the reconstruction era, in those who went on sprees after pay-day, until I detected the nature of the liquor consumed. It is essential, therefore, that good whiskey be used.

Another point is the reference to Dr. Mitchell's opinion that "seven-eighths of all persons bitten by rattlesnakes recover." If he means that the percentage of dangerous bites runs in that ratio without treatment, he had better not get bitten himself. From what I know of the subject—and I have collected a large number of presumably authentic reports—I believe that, aside from thorough treatment by alcohol, seven-eighths of all cases bitten by the *crotalus horridus* of over three years old will *die*, and the *toxicophis piscivorous* is worse, for its bite is fatal at an earlier age. I know of a case in which a cotton-mouth two years old killed a man who had energetic treatment by permanganate, ammonia, caustics, cupping over the wound, and split-chicken poultices. The doctor who reported the instance to me was a tee-totaler, which was a bad thing for the patient.

Most snakes with us are non-poisonous, and the rustling of the grass, &c., under the escape of the reptile after its attack is taken for the music of a rattler by the frightened victim or onlookers. Of course, many escape thus, and the results of experiments in the laboratory on rabbits possess no value whatever concerning man's relation to snake-bites. I have, in a paper entitled "As to Snake-bites," in the *Medical Register* of March 24 last, more fully stated my views on this subject; but, to avail myself of the large circulation of the REPORTER, I write, hoping to enlist the good sense of those who are called on to treat snake-bites by going at the matter promptly and decidedly. Don't "proceed to operate" or "exhibit" an antidote—GIVE the patient alcohol in some form in plenty, but don't make him drunk unless you can't help it.

246 North Twentieth Street.

—Dr. Thomas J. Mays has been selected to deliver the address before the Lehigh Valley Medical Association at its next annual meeting, at the Paxinosa Inn, Easton, Pa., August 15, 1888. His subject will be: "The Treatment of Lung Cavities."

PROFESSIONAL PREJUDICE.[1]

By RICHARD J. LEVIS, M.D.,
PHILADELPHIA.

Prejudice has done more to maintain and perpetuate error than any other cause.

Prejudice has been defined as a notion or opinion which the mind entertains without knowing the grounds and reason of it, and which is assented to without examination. There was a time in the past when we were obliged to rely on foreign surgical books, but the development of American surgical works is so satisfactory, and the future of American surgical literature seems so assured, that it is entitled to our almost exclusive patronage. American surgical literature has made its impress on the entire surgical world.

Our systematic works on surgery are not exceeded in merit for general adoption as the leading text-books for all of our medical schools. With the excellent works on special departments, as gynecic, ophthalmic, and oral surgery, and the monographs on fractures and dislocations and genito-urinary surgery, we would not suffer nor fall behind if nothing on these subjects were ever brought from abroad. Still we erroneously encourage the reprinting of English books, and it continues to be a paying business to publishers. The absence of copyright enables them to publish unfairly without compensation to foreign authors, and thus they can undersell the works for which Americans are paid. In disregard of a sense of right and justice to the profession and to the community, this traditional error continues.

We are now possessed of such meritorious text-books of general surgery that it is no longer necessary that our medical colleges should recommend works of foreign origin. But this is done to a great extent, and quite frequently it is evident that a marked prominence or preference is given to the foreign text-books. I have examined the annual announcements of seventy-two American regular medical colleges, and find that there are in all one hundred and fifty-seven recommendations of American works and one hundred and eighty-six of foreign authorship. The single well-known surgical text-book receiving the greatest number of faculty recommendations is of English origin.

The inference from this traditional error of preference for foreign works must be the conclusion that many of the faculties of the schools are influenced by either an honest conviction of the inferior character of the works of American origin, or else by a spirit of dishonorable jealousy of our own countrymen, of high renown as authors, or of the colleges with which some of them are associated.

The science of surgery is based on ascertained truths, and we need less of theories and systems—not what is thought or supposed, but what is observed and found to be fact. Much error is transmitted and becomes traditional from the lack of systematic records of observation in hospitals and by private practitioners. It is but recently that some of the largest general hospitals of the country have begun even the most simple records of surgical cases. The recording is usually done by the resident surgeons, who are young and inexperienced, and the records receive little, if any, supervision from the attending surgeons, who are chief in authority in the wards. From the hundreds of thousands of patients admitted to the various hospitals of our country, the results to surgical literature by records from practical experience are extremely meagre. The records of the experience of individual practitioners, of intelligent and trained minds, would be a gain to surgical progress, and tend to avoid the transmission of traditional errors. From practitioners in regions far away from medical centres, in such locations as are abroad styled provincial, have originated some of the most valuable practical discoveries and advances. There may be instanced the discovery of vaccination, in rural England, by Jenner; the origin of ovariotomy, by McDowell, in what was then a frontier region of Kentucky, and its development by Atlee, in Lancaster County, Pennsylvania; and the very beginning of practical gynecology, by Marion Sims, in the obscurity of Northern Alabama. It is said that the ploughman, tilling the fields of the western slope of our continent, who keeps his eyes intently on the furrow, may occasionally find nuggets of gold; and so the faithful toiler amidst human ills is liable to unearth jewels of fact, which, garnered and recorded, will add to the wealth of surgical knowledge.

Few of the advances of civilization have been made without meeting the obstacle and opposition of prejudice. The early histories of Harvey, Jenner, Morton, and Lister are the records of struggles and suffering under professional contumely and vicious opposition. Dr. Morton, to whom the world is

[1] Extract from the Presidential Address, on The Traditional Errors of Surgery, at Thirty-ninth Session of the Medical Society of the State of Pennsylvania.

indebted for practical anæsthesia, went early from this life, without either proper award of honor due him or even reimbursement for the outlay of his entire fortune by time and labor spent in introducing his discovery. Practical anæsthesia commenced with its production by Morton with sulphuric ether. It was a more original discovery than was vaccination by Jenner, who admitted that he had learned from the country people that those who had become accidentally inoculated with virus from the cow were thereby rendered secure from smallpox. Time, which "at last sets all things even," will write on an immortal tablet the name of Morton: "Death opens the gate of fame, and shuts the gate of envy after it."

As an illustration of the spirit of prejudice against Morton's introduction of anæsthesia by sulphuric ether, and of its slow adoption by surgeons, I quote from the *Medical Examiner*, of this city, in the year 1846:

"We should not consider it entitled to the least notice, but that we perceive, by the *Boston Medical and Surgical Journal*, that prominent members of the profession in that city have been caught in its meshes. We are persuaded that the surgeons of Philadelphia will not be seduced from the high professional path of duty into the quagmire of quackery by this will-o'-the-wisp. We cannot close these remarks without again expressing our deep mortification and regret that the eminent men who have so long adorned the profession in Boston should have consented for a moment to set so bad an example to their younger brethren, as we conceive them to have done in this instance. If such things are to be sanctioned by the profession, there is little need of reform-conventions or any other efforts to elevate the professional character. Physicians and quacks will soon constitute one fraternity."

The editor of *The Annalist* said:

"The last special wonder has already arrived at the natural term of its existence, and the interest created by its first advent has, in a great measure, subsided. It has descended to the bottom of that great abyss which has already engulphed so many of its predecessor novelties, but which continues, alas! to gape, until a humbug yet more prime shall be thrown into it."

The New York Journal of Medicine said:

"We are sorry to see many of our brethren, at home and abroad, stooping from the exalted position they occupy in the profession to hold intercourse with, and become the abettors of, quackery in any form. Such doings are certainly contrary to the ethics of the profession, and should not be tolerated for a moment in any one."

The Medical and Surgical Journal, of New Orleans, offered the following sentiment:

"That the leading surgeons of Boston could be captivated by *such an invention as this*, heralded to the world under such auspices and upon *such* evidences of utility and safety as are presented by Dr. Bigelow, excites our amazement. Why, *mesmerism*, which is repudiated by the *savans* of Boston, has done a thousand times greater wonders, and without any of the dangers here threatened."

Such extracts illustrate definition of prejudice. The animus was not that of "honest doubt," but of vicious opposition and jealousy. "But even the right comes uppermost," and as early as 1847 Oliver Wendell Holmes, who created the word anæsthesia, wrote:

"Nature herself is working out the primal curse which doomed the tenderest of her creatures to the sharpest of her trials, but the fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deepest furrow in the knotted brow of agony has been smoothed forever."

There is no sadder or more painful story of traditional error, due, for the most part, to obstinately held preconceived opinions, than that of the opposition to and the long probationary trial of ovariotomy.

The practical establishment of ovariotomy is due to one of my honored predecessors in this Presidency, Dr. John L. Atlee, of Lancaster, seconded by his younger brother, Dr. Washington L. Atlee, of this city.

The single precedent of McDowell probably had little, if any, influence on these pioneer surgeons, who, by long-continued patient labor, bearing the brunt of professional opposition and obloquy, demonstrated the value of the operation. The early triumph of ovariotomy is due to the labors, trials, and sufferings of the Atlee brothers.

In an address by Dr. Washington L. Atlee, about thirteen years ago, he said:

"As, during the probationary stage of ovariotomy, I was under the ban of the profession and had to suffer from unjust obloquy, I hope that I may be pardoned in any honest manifestations of triumph since the curse has been removed."

. . . . "Ovariotomy was everywhere decried. It was denounced by the general profession, in the medical societies, in all the medical colleges, and even discouraged by the majority of my own colleagues. I was misrepresented before the medical public, and was pointed at as a dangerous man, even as a murderer. The opposition went so far that a celebrated professor—a popular teacher and captivating writer—in his published lectures invoked the law to arrest me in the performance of this operation."

. . . . "What is most remarkable, the strongest opposition came from those who had never seen the operation, who would not consent to see it, and who consequently knew nothing about it."

"At the opening of the session, 1844–'45, of Jefferson Medical College, Professor Thomas D. Mütter, in his introductory address, used these expressive words: 'A distinguished philosopher has classed man among the most cruel of all animals. . . . . Certain it is that some of our operations may be considered as supporting, to a limited degree, the charge made against our race; and there is none in the whole domain of surgery better calculated to

elicit, even among the profession, a more profound sensation of horror, or better deserves the epithet of cruel, than one recently introduced into practice; and, were we not convinced that nothing but a fervent desire to relieve a suffering mortal could induce a surgeon to undertake its performance, we should at once look upon its author as a being destitute of either sympathy or compassion, and richly deserving the detestation of his fellow-men. The operation to which I refer is that for the removal of ovarian tumors!'"

. . . . "Professor Charles D. Meigs thus emphatically expressed himself: 'I detest all abdominal surgery.' 'I am free to say that I look upon all operations for the extirpation of the diseased ovary as not to be justified by the most fortunate issue in any ratio whatever of the cases.' 'Dr. Atlee's coolness in cutting open a woman's belly does not, I think, entitle him to judge more clearly than I, as to the morals of such surgery. . . Dr. Atlee likes ovarian operations; on the contrary, I detest them, and should be glad to see them prevented by statute.'

. . . . I should be glad if you would look over the statistics of ovariotomy to discover how many bellies have been ripped up by the surgeons in the expectation of having the blessed satisfaction and *praise* of curing a tumor. Suppose a surgeon to open a woman's belly to extirpate an ovary; that he finds no ovary there; that he then sews up the gash; and next, that she dies! What should the attorney-general say? 'It would scarcely be unfair to say, of all the fatal results of operation for extirpation of the ovary, that the patient is compelled to render her soul to God, and her carcass to the surgeon.'"

We have, in the soulful devotion of the Atlee brothers to ovariotomy, the material of a homily, with the text from Solomon: "Love is strong as death; jealousy is cruel as the grave."

I cannot conclude this sad subject of the struggles and triumphs of ovariotomy better than by again quoting Dr. Washington L. Atlee's own words:

"The history affords a moral to all young men who are cultivating the fields of science and humanity. In all the battles of professional life, let them weigh well their foundation of action, think for themselves rather than follow doubtful authority, cultivate a pure conscience, adhere strictly to professional and moral rectitude, sacrifice self on the altar of humanity, allow no personal considerations to outweigh their obligations to their patients, and turn neither to the right nor to the left, while in the path of duty, when professional storms assail them. Then, even should they err at times, they will pass through the fire purified, though the whole world may have been armed against them."

—The *Weekly Abstract of Sanitary Reports*, July 13, 1888, says that the following information was received from Plant City, Florida, under date of July 10: "Only about thirty persons in the place who have not had fever. Five new cases reported to-day. Total population, 200. Most of the unacclimated move out. Guard around place to prevent communication."

Society Reports.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN PÆDIATRICS.

Stated Meeting, June 27, 1888.

J. Lewis Smith, M.D., Chairman.

Before introducing the essayists of the evening, the Chairman stated that the importance of the subject which they would discuss was made evident by the number of deaths (two thousand) which took place annually from summer diarrhœa in New York City. It was the dreaded disease of the hot months.

Dr. A. Jacobi then read his paper, entitled

Remarks on Summer Complaint,

which were directed more especially toward defining the term. He regarded summer complaint as a clinical entity, so to speak, and not a pathological entity. He made that point because, he said, it had become the custom to so shape our ideas regarding the pathology of this disease, and indeed of diseases generally, as to assume that there was but one cause for a large number of maladies. But this, from the clinical standpoint, he thought, was decidedly wrong. The very fact that a large number of bacteria had been discovered, and that a few diseases had been traced to a single bacterium, had led to the assumption that nearly all infectious diseases, and some others, are due to such a cause. This assumption he regarded as probably true in many cases, and it was desirable that it should be so; but he thought physicians had drifted too far with that current. We were inclined, he said, to believe that such diseases as diphtheria, scarlet fever, and so on, are due to invasion of the system by certain bacteria. He said 'we were inclined to believe it,' but it has not yet been proved; yet it was possible, it was probable, it was even desirable. It would facilitate the study of pathology a great deal, if it were proved. But imagine, he said, one asserting that there could be no inflammatory disease of the respiratory organs without a pneumococcus; that pneumonia, under all circumstances, meant a coccus disease. This would certainly be a mistake. The same, he thought, is true of summer complaint. Different forms of inflammation and ulcerations in the intestinal tract give rise to the same clinical symptoms. While it is true there is a form of intestinal inflammation which appears to be due to the

formation of bacteria, yet, when speaking of summer complaint, physicians often have in mind a number of diseases which have the same symptoms; symptoms which do not belong to one and the same anatomical lesion.

A question which is constantly recurring is: whether or not heat by itself is a sufficient cause of diarrhœa. This direct effect of heat had been denied before the Academy only a short time ago by Dr. Seibert, and the questions of fermentation and bacteria had come to monopolize attention to such an extent as to exclude from vision any other etiological factor.

Dr. Jacobi holds that diarrhœa may be produced by the influence of heat alone, and thinks that not unfrequently such cases are among the most severe. Diarrhœa sometimes occurs during sunstroke in the adult. Why solar heat should act on the brain alone, and not on other parts of the nervous system, he regarded as inexplicable. Infants brought up on good mother's-milk should never, according to the bacterial theory, have diarrhœa, yet we know that heat affects them in the following ways: it produces convulsions; it produces convulsions and diarrhœa; it produces diarrhœa. At any age, diarrhœa from neurotic causes is frequent enough. It can be produced by dividing the mesenteric nerve. The center for this paralytic diarrhœa is, he thinks, in the medulla oblongata.

Dietetic Management of the Summer Diarrhœa of Infants.

Dr. A. V. Meigs, of Philadelphia, read a paper on this subject. He first described what he regarded as proper dietetic management of the complaint, and then gave his reasons for it. When called upon to treat a case, the first question which the physician should ask is: What food has the child been taking? If it is being nursed, the physician should be very careful about ordering a change; it should be done only in case he is convinced that the diet is the cause of the complaint. Even in cases of acute cholera infantum, he could hardly convince himself that it was well to take the infant from the breast if it was previously healthy and the mother's health was also good.

The child becomes thirsty, and should be given water. If this is given instead of milk between the stated periods for feeding, the system would receive what it needed and nothing more. He thought stimulants were more nearly allied to dietetics than to therapeutics, and would say that he regarded stimulation as important in cases of summer diarrhœa. A teaspoonful of brandy might be put into a glass of drinking-water, or the child might receive thirty drops in sweetened water every two hours.

If the mother's milk is in any way faulty, nursing must at once be stopped. In some cases, half an ounce of beef-juice with a pinch of salt will be of benefit. But the best food for infants, after the mother's milk, is cow's milk, and the question of artificial feeding in health and in disease hinged, he said, largely on its method of use. He was unable to accept the view that the best treatment of summer diarrhœa and acute cholera infantum is to stop all milk and put the child on meat-broths. Cow's milk contains too much caseine and must be diluted; it did not contain a sufficient amount of sugar, and must be sweetened; it was acid, and had to be rendered alkaline; when diluted, it should have an additional amount of the fatty elements added. The milk should be absolutely untainted when used. By clinical experience he had found that cow's milk to which had been added cream, sugar, and lime-water, gave good results; and, when by chemical analysis he had found that such a mixture contains the same constituents in almost exactly the same proportion as human milk, he had become entirely convinced of the value of this food. Since writing his book, he has further studied the subject, and has settled upon the following method of preparing the milk: he takes one quart of cow's milk, puts it into a tall narrow pitcher; after it had stood three hours, the upper pint is poured off. This contains the greater part of the fat, the cream. When the child is to be fed, he mixes together two ounces of this, three of lime-water, and three of sugar-water. If the infant is quite young, only two to four ounces will be needed at each feeding, and only that much should be prepared. The general directions, he said, are the same as for feeding a healthy child. In infants in health, it is very important to take a lesson from nature, and not increase the strength of the food before the sixth month or twelfth month, and in cases of summer diarrhœa this is absolutely essential. While he regards this as in most cases the best food, he varies it in many ways to meet the needs of different cases. Of the four things necessary to make cow's milk suitable for children with diarrhœa, addition of cream, sugar, and lime-water, the least essential probably is the use of milk-sugar. Occasionally it becomes advisable to use cane-sugar in diarrhœa. The

addition of some starchy material, he thinks, is of great advantage in many cases. One of the best is arrowroot; and the old method of boiling flour in a sack, he says, is excellent. Dr. Meigs recommended Mellin's food, which should be given in the proportion of a teaspoonful to four ounces of whatever milk food is being used. In some cases, excellent results had been obtained by taking away all milk and administering animal broths alone, although in his experience this is only exceptionally the case. Children commonly soon refuse their food, if given broths alone.

He regards it as very important to give particular directions as to how often the infant should be fed and the quantity of food to be taken. He believes the best results are obtained by not making much change in the frequency of feeding in mild cases; for young infants, feed every two or three hours, and, for those of six months, feed five or six times in the twenty-four hours. In severe cases, on the contrary, his rule is to give a small quantity of food, half an ounce to three ounces, every two hours. If the case is critical, collapse threatening, stimulants will be more to the purpose. One should not change the food too soon because the patient fails to grow better immediately.

Dr. Meigs thought the time was not yet ripe for unqualified acceptance of the action of bacteria or chemical poisons in the causation of all cases of summer diarrhœa, and of basing the treatment and feeding on this view alone. There are too many reasons, he said, some of them strong ones, pointing the other way. Especially should the physician not permit this view to lead to the substitution of an exclusively animal diet in every case.

A Clinical Study of the Etiology and Treatment of the Summer Diarrhœa of Infants.

Dr. Simon Baruch read a paper with this title. He believes now that the summer diarrhœa of infants is due chiefly, though not solely, to the influence of micro-organisms. Certainly the theories heretofore held regarding its etiology are faulty. Unsanitary conditions, artificial feeding, and over-heat can not now be regarded as more than predisposing elements. He had found summer diarrhœa as fatal in the pine forests of Georgia as in the tenements of New York. That the disease is not due alone to artificial feeding, he thought was proved by the fact that very few children died of diarrhœa in the winter, although they were then fed the same as in the summer. High atmospheric temperature, he said, doubtless exercised an important influence in the production of summer diarrhœa. While unsanitary conditions, artificial feeding, and excessive heat act in unison in the production of summer diarrhœa, yet he believes their *modus operandi* is generally misunderstood. He said he was convinced that the kind of food would be of less importance if we could prevent the entrance of micro-organisms into its preparation. Human milk he regards as the best, and largely because when taken it is free from unwholesome conditions. Cow's milk is next best, and it should be kept as clean as possible. He suggested that the goat might be tamed from the earliest months, so that by some mechanical device the babe might draw its milk directly from the teat. In order to sterilize milk with heat, it must be boiled under pressure; raising it to a temperature of 212° F., he said, would not effect the purpose.

Dr. Baruch next discussed the hygienic management of the patient, and dwelt somewhat on the advantage to be derived from sponging the body, and from the use of cold water to reduce temperature. The external surface might be clammy and cold to the touch, yet in such cases, he said, it would often be found that the temperature, when taken in the rectum, is considerably elevated, perhaps even to 106°, and the cold bath would be of benefit. He thinks it advisable to cleanse the infant's mouth with a solution of boracic acid. The nipple should be kept clean.

In the treatment, he sought to remove or diminish the bacterial supply, to neutralize their effect, to remove them from the alimentary tract, to meet the exhaustion and other effects of the diarrhœa. Regarding an exclusively meat diet, he said he was not aware that there are any number of physicians who are accustomed to order it. He did not think it necessary, at least for a longer time than a day. He usually gave it with something else. Much benefit will often be derived from total abstention from food for a few hours. He employs with benefit washing out the bowel through a rubber tube. If the patient lies on its belly across the nurse's lap, overdistention will be obviated. He said he did not expect any decided results from the internal administration of antiseptics. He now has little confidence in astringents, which he formerly used extensively. After all materials had been removed from the intestinal tract,

he regarded opium as of benefit in allaying irritation, but hitherto it had been used too indiscriminately. Alcoholics, he thinks, are a valuable aid.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, June 13, 1888.

The President, J. Solis-Cohen, M.D., in the Chair.

Dr. J. H. W. Chestnut read the

Report of a Case of Ovariotomy.

Under the benign influence of antiseptics, the recent progress of abdominal surgery has been so remarkable, and the number of ovariotomies has been so considerable, that this case is reported, not because of special characteristics, but rather as a further demonstration or exemplification that the operation in question has been removed from the border-land of doubt, and has become one of those which the general practitioner who does surgical work may, under proper circumstances, essay to perform.

On November 10, 1887, Mrs. J., æt. thirty-seven years—a small woman, weighing one hundred pounds; the mother of two children, the younger six years old—consulted me in reference to an abdominal enlargement which occasioned her uneasiness. Her periodical sickness was regular but scanty. She had nausea, and was much distressed by frequent, and at times ineffectual, efforts at micturition.

A careful examination of her abdomen by palpation revealed a tumor about the size of a large apple, which inclined from the left to the middle and seemed to be solid. A vaginal examination gave a movable womb, a firm os and conjoined manipulation assured me that the case was not one of pregnancy. The uterine sound was used and gave a measurement of 2.7.

Under the impression that the nausea and irritation of the bladder were due to pressure, a supporting-bandage was ordered, and small doses of thymol (gr. 1-5) and ext. belladonna (gr. 1-20) were prescribed. On November 20, I saw the case again. The general abdominal swelling had materially increased, the special tumor was larger, but the nausea and the difficulty of urination were less. After a second examination, it seemed clear that the tumor was ovarian, but, in the belief that, under the circumstances, operative measures were not for the time demanded, it was determined to try the efficacy of medicinal treatment, as recommended by Courty, who cites two well-marked cases of recovery. Chloride of gold and sodium, iron in various forms, iodide of sodium, iodide of potassium, and arsenic were given internally; to these were added inunctions of iodide of lead, iodide of potash, belladonna, and graduated pressure by rubber bandages. These efforts were successively tried without success; in fact, I am disposed to believe that the methods pursued were rather injurious generally than otherwise.

The tumor enlarged rapidly, and the general health of the patient depreciated. On December 6, she had a violent chill, ushering in a peritonitis of grave severity, accompanied by great dyspnœa. The peritonitis finally yielded to a large blister, 8 x 8 inches, and the internal administration of calomel and opium. After the subsidence of the acute inflammatory symptoms, a persistent nausea, with occasional attacks of diarrhœa, protracted the convalescence. She was able to go about the house by the middle of January, 1888; but was rarely without dragging abdominal pains, was unable to sleep well, had frequent attacks of dyspnœa, and, in consequence of impaired digestion, as well as because of the inroads made on her vitality by the growing cyst, her emaciation became marked. On several occasions, a suppression of urine, due to pressure on the ureters or on the kidneys, was a serious complication. Dry cups to the lumbar region and along the groin, followed by hot mush poultices, were effectual in relieving the condition. She declined an operation.

On March 3, a second attack of peritonitis threatened to terminate the case; it was treated by anointing the now large abdomen with oleate of mercury and extract of belladonna, one drachm of the latter to one ounce of the former, and by full doses of opium by the stomach. The patient was able to leave her bed in ten days and agreed to an operation for removal at the earliest practicable time. The preparatory treatment consisted in the administration of syrup of the iodide of iron, the use of Murdock's liquid food, meat-juice, milk, and milk punch, in addition to such table-food as she could take. Her digestion was assisted by pepsin in acid solution. The whole body was well rubbed once daily at bedtime with a mixture of sweet oil and whiskey, and her belly was anointed once a day with belladonna ointment, which, at least, was a source of great comfort. The bowels, which had become torpid, were regulated by drachm doses of extract of cascara sagrada,

supplemented by an occasional enema. The sluggish kidneys were stimulated by dry cupping and by small doses of digitalis, which also exerted a favorable influence on the shortness of breath.

The determination of a limit of necessary endurance may have by some psychological influence stimulated the vitality and so seconded the nursing and feeding that the general condition materially improved without cessation in the progress of the cyst or favorable change as to emaciation. April 11 was the time fixed for the removal of the cyst; the abdomen was then larger than it should have been in a pregnancy at full term; fluctuation could be elicited, but was not so marked as the distended abdomen would have suggested; the face, neck, chest, and limbs were very thin; and the skin, notwithstanding its sedulous care, was somewhat harsh. The direct preparations were simple. On the 9th, her room was cleaned and lime-washed, and all furniture save the single bed removed. A solution of carbolic acid was kept simmering on the stove. On the morning of the 10th, a glass of hot lemonade with a teaspoonful of heavy magnesia was given, fasting, and in the afternoon she had a dose of castor oil, followed, after several free evacuations, by one grain of opium. On the morning of the 11th, she was well washed, had a bowl of boiled milk for her breakfast, and at eleven o'clock a tablespoonful of brandy and thirty drops of tincture of opium.

The antiseptic measures were a solution of bichloride of mercury, 1 to 2000, used to wash the abdomen; two pounds of a 95 per cent. solution of pure carbolic acid, from which dilutions were made—1 to 30 for instruments and sponges, and 1 to 40 for use within the abdominal cavity; a solution of thymol, 1 to 1000, used to spray the abdomen before closing; and some finely-powdered iodoform, with a good supply of salicylated cotton.

The kitchen table and a backless chair completed the arrangements. After the patient was under the influence of the ether, my friends, Dr. A. H. Hulshizer, Dr. W. H. Hech, and Dr. William C. McFetridge, entered the room. Dr. Hech assumed charge of the ether, Dr. Hulshizer assisted me throughout the operation, and Dr. McFetridge took charge of the antiseptic solutions, gave the hypodermic injections hereafter mentioned, and had the care of hot bottles, etc.

The abdomen was well washed with the bichloride solution. After making the usual incision of about three inches through the abdominal walls, opening the peritoneum, and pushing aside a fold of omentum, the wall of the cyst was seen. As was expected, a sound introduced between the cyst-wall and the peritoneum revealed extensive adhesions, and the incision was at once enlarged to about six inches. Such of the adhesions as would not yield to the finger—and they were many—were tied with carbolized catgut ligatures and cut close to the cyst. Even after all adhesions within reach had been severed, the tumor seemed barely movable. It was evident that the walls were thick and fleshy in parts, and that the contents of some of the divisions were at least semi-solid. A trocar and canula with angular attachment for gum hose was plunged into the most prominent and apparently the largest division low down. After approximating the wall of the cyst to the canula as closely as possible, about a bucketful of thick brown fluid was run off; when the liquid ceased to flow, the sac was pulled out of the cavity as far as possible, a ligature thrown around the opening and tied. The evacuation of and traction upon this cyst enabled me to reach deeper adhesions which were treated as before, and then a second cyst or cystic division was emptied by the canula. I was then able by persistent manipulation and the severing of other adhesions to eventrate the mass; the pedicle was pierced by a small flat needle carrying a double carbolized silk thread; each half was tied separately and the ends of the thread brought around the body of the pedicle and tied again. The pedicle was cut about three-quarters of an inch from the ligature; it was well washed, dried, and dropped into its bed.

There remained to see that no oozing occurred, to clean and to close the abdominal cavity. There was almost no oozing. The cavity was carefully sponged out, and an almost hot spray of the thymol solution was thrown in, the folds of omentum which had been wrapped in a hot napkin—occasionally changed—were replaced, and the wound was closed by eight silver sutures, each enclosing the peritoneum. Over the line of incision a moist piece of lint, spread with iodoform, was placed and held in place by three broad strips of adhesive plaster, then a pad of salicylated cotton, and over all a bandage of double flannel. The bladder was emptied and the patient put in bed.

During the operation, an hypodermic injection of sulphate of atropia in a drachm of whiskey was given once when the respira-

tion became alarmingly feeble, and another of a drachm of whiskey alone was given at the conclusion of the operation.

I may note a little misadventure that afterward proved troublesome. One of the hot bottles placed at the patient's side, to maintain heat, must have slipped for a moment under her buttocks, and been the initial irritation of a bed-sore.

The subsequent nausea was a little obstinate. It continued during the first twenty-four hours, and yielded either to the returning vitality of the stomach or to the external application of an ice-bag and the internal administration of one-quarter of a grain of cocaine, given every three hours for four doses. The nurse was instructed in the use of the catheter, and used it for the first eight days. The diet was restricted for three days to beef-juice with brandy, and oatmeal gruel, with Apollinaris water to drink. After the fourth day, there being no nausea and no fever (the temperature was never above 100.5°), a gradual return to a generous diet was permitted. The bowels were moved on the sixth day by enema, after a dose of castor oil.

About this time, complaint was made of the bed-sore. I found it on the right buttock, with an ugly-looking slough. The slough was cut out, the cavity washed with carbolic acid solution, and filled with finely-powdered charcoal, covered with adhesive plaster. It was well washed out daily with a syringe, and refilled until it healed by granulation. This was the only untoward symptom or circumstance following the work. The bowels assumed a regular action, and the bladder, glad to be free from the unwelcome catheter, behaved better than it had done for months. With a good appetite satisfied, the continuance of the sweet oil and whiskey bath daily, and the tonic influence of hope, assured, every day, added strength to the patient. Four weeks after the operation, she went to Salem, N. J., to recuperate further, and I am advised that she is quite well.

In looking over the case, it may be questioned why I did not tap for relief. The temptation to do so was great, but, independently of the danger of the procedure, which might have been considerable, it could only defer what should be the termination of the case. Tapping could not even promise with certainty considerable relief, for the fluctuation was not very marked; it might strengthen the patient's disinclination to have the cyst removed, and it was at variance with my opposition to half-way measures after a definite conclusion had been reached. I did not weigh the mass and contents, but I was assured by the patient's husband that the fluid and solid material weighed fifty-seven pounds. After removal, the smaller divisions were opened and found to contain a semi-solid brown substance, which could be pressed out. The cyst-walls were thick and fleshy in parts, and thin and softened in other parts. My friends agreed with me that the cyst would, at no distant day, have ruptured.

Of such a work, it may be said that the gravity of possible consequences, the traditions of the past, and the preceding grave symptoms have attached to it a formidable name and an importance somewhat at variance with the simplicity of its performance and the proportion of good results. The busy practitioner has daily on his lists cases infinitely more obscure as to character, more difficult as to treatment, and less hopeful as to results.

Dr. G. G. Davis, in opening the discussion, said: I wish to take exception to the preliminary remarks of the reader, that his case demonstrates that it is right for the general practitioner to undertake this class of operations. I hold that no one should open the abdomen unless he is prepared for whatever may be found, and we know that the most experienced operators tell us that they cannot be positive, in advance of incision, of the conditions that they will meet with. It may be, as here, a very simple matter, or it may be a very serious one. Only those who have had a certain amount of preliminary training, and are prepared to follow up the operation by the most radical procedures, if necessary, should do these operations. One case cannot be considered as establishing a principle.

Dr. Goodell: There is one point I wish to call attention to in connection with this graphically detailed picture of an ovariotomy, and that is the danger of having sloughs produced by hot water, to which the author has alluded. In a case of oöphorectomy for fibroma, of which I am cognizant, the flannel in some way became probably displaced from the hot bottles, and two severe burns of the heels were caused, the recovery from which was more tedious than from the operation. One other little point: It is a mistake to introduce the trocar at the lower angle of the wound; for, as the cyst empties, it collapses and may slip off from the trocar. The rule is to introduce it at the highest angle of the wound, so that it may have room to travel down with the collapsing cyst.

Dr. Chestnut: The case was not presented as a single one to establish a rule, but as an additional illustration to the many on record that, under antiseptic precautions and under proper circumstances, the general practitioner who has confidence enough to do surgery at all may also do an operation like the one reported.

Periscope.

Tuberculous Ulceration of the Vulva.

Dr. M. Zweigbaum, of Warshan, records a case of this rare manifestation of tuberculosis in the *Berliner klin. Wochenschrift*, May 28, 1888. The patient came under his observation in 1885, but the year before had been treated for fungous ulceration of the vaginal portion of the uterus. Paquelin's cautery was used, and the patient was discharged "cured." She was thirty-two years old, and had had five children. On admission under Dr. Zweigbaum's care there was a deep painful ulcer just within the left posterior vaginal wall, forming a cavity an inch and a half long and an inch deep, together with cauliflower excrescences of the portio vaginalis. The left labium minus was almost destroyed by ulceration, and microscopic examination of a portion revealed abundant tubercle bacilli. The apex of the right lung showed obscure signs of phthisis on auscultation and percussion. The spleen was somewhat enlarged, and the patient was feverish. In five months death ensued from exhaustion, the lungs having shown further alterations. There had been purulent expectoration, and toward the end œdema of the lower limbs. Syphilis was positively excluded in this case, which was examined by several colleagues. Dr. Zweigbaum has carefully examined the literature of the subject, and finds only two cases of tuberculous ulceration of the vulva recorded (Deschamps, Chiari). Taking into account the vagina and cervix uteri, twenty-nine cases of primary disease are recorded by various observers, and a short synopsis of each case is given. The disease is by no means rare in the course of general tuberculosis, but is rare when primary. Cohnheim gives one case, Fernet four cases, of infection by coitus. Others are ascribed to examinations, or syringing by nurses who are tuberculous or much in contact with tuberculous patients. Numerous cases are recorded as having occurred immediately *post partum*. Intercourse with phthisical patients appears also to be more or less dangerous; for example, by the use of the same bedclothes, closets, or baths. Autoinfection may also occur from the sputa or feces, and thus a secondary tuberculosis may be set up. Frerichs disputes the possibility of infection from without, and argues that it takes place by conduction from the Fallopian tubes, more rarely the uterus. The stages successively occupied by infectious material are very difficult to make out, because each organ or part successively traversed may show no trace of the virus afterward, the nidus being unsuitable. We do not yet know the conditions which favor the establishment of the tuberculous process in a particular part. It is probable that certain pathological processes induce a predisposition for tuberculosis, as in the lungs. These comments of Dr. Zweigbaum on his case teach us above all the value of cleanliness, or rather the great dangers which attend its absence.—*British Med. Journal*, June 23, 1888.

Case of Intracranial Abscess.

At the meeting of the Medico-Chirurgical Society of Glasgow, April 6, 1886, Mr. Henry E. Clark reported a case of this kind. A disc of bone removed from the skull by trephining in a case of intracranial abscess was shown. The bone was very thick, and was quite devoid of diploë. It was pierced by a small opening, only large enough to admit a silver probe, through which pus had discharged before the operation. The abscess was situated at the back part of the left parietal and temporo-sphenoidal lobes, and gave rise to no motor phenomena, and only doubtful sensory ones. The patient had experienced two attacks of inflammation of the middle ear, one five years before and the second within the previous six months. About four months previous to the operation, the discharge from the ear ceased, and he then had severe headache, followed by the formation of a swelling over the posterior parietal region. This was lanced and pus evacuated, leaving a sinus, which continued to discharge at the date of the operation. On removing the disc of bone, pus freely welled up through the ragged dura mater, and on introducing a probe the cavity was found to lead down to the petrous portion of the left temporal, which was found to be eroded, but the opening into the middle ear could not be made out.

Mr. Clark drew attention (1) to the existence of a large abscess, without signs of

pressure, on the cerebral cortex; (2) to the fact that the man was a prisoner awaiting his trial for assault, and the question arose as to the possibility of the cerebral affection having something to do with the excitement under which the assault took place; and (3) to the very small opening through which the pus escaped. Mr. Clark thought it probable that the opening was accounted for by the pus having followed the course of an emissary vein placed in an abnormal position.—*Glasgow Med. Journal*, June, 1888.

Cerebellar Hemorrhage.

At the meeting of the Royal Medical and Chirurgical Society, June 12, 1888, Mr. A. Ingle (Shelford) read the notes of a case which occurred in a widow 63 years old. Ten years before she had had an attack of paralysis on the left side, from which she recovered, the only remaining defect being a slight lisp. She had been subject to bilious attacks, and had often complained of giddiness in the head. On February 12, 1888, she walked a mile to chapel, sat the service out, and afterward it was noticed she was looking unwell. She walked into the vestry, thinking one of her bilious attacks was coming on, but, feeling much worse in the course of an hour, she was helped to a neighbor's house, and soon afterwards vomited. She was put to bed, and became very drowsy. Several attacks of vomiting occurred during the day. She would mutter replies to questions, but one could get but very little information from her. She complained of no pain except headache. There was some retraction of the head; pulse 88, regular, fair volume and strength; arteries somewhat atheromatous; the first sound of the heart was not quite clear, but there was no definite murmur; the pupils were equal and active to light; no arcus senilis, no loss of power or sensation. Next day her condition was unchanged, but there was no further vomiting. On the 17th there was some loss of power in the left arm, and the urine occasionally dribbled away; the patient lay in a drowsy condition, but seemed to hear whatever was said in the room, and would occasionally interpose a remark. By the 20th the left arm was entirely paralyzed, also some muscles on the left side of the face. Two or three days later the tongue was protruded to the right. She lingered till the 27th—fifteen days from the commencement—occasionally passing for several hours into a comatose state (once for forty hours), when she would be perfectly still, taking nothing, and not being able to be roused. For the last forty-eight hours she was in this condition. There was no evidence of loss of co-ordination. The following were the notes of the *post-mortem* examination: Very thin and soft skull. Much senile atrophy of convolutions and accumulation of subarachnoid fluid. No softening or lesion on exterior. Occupying position of right claustrum was a small cyst three-quarters of an inch deep by one-sixth inch broad, containing clear serous-looking fluid. In left cerebellar hemisphere was a large hemorrhage, chiefly in region of convolutions, involving only posterior part of whole cortex. This extended a little to the right of the middle line. There was, besides, a small hemorrhagic softening in the posterior wall of the posterior cornu of the right lateral ventricle, but no blood in the ventricles. Much atheroma of cerebral arteries.—*British Med. Journal*, June 16, 1888.

Insanity following Operations upon the Female Genitalia.

At the meeting of the Second Congress of the German Gynecological Society, at Halle, Werth, of Kiel, stated that of 270 women upon whom he had performed laparotomy he had observed in six insanity (melancholia) after the operation. Three of these patients were predisposed by heredity. The first symptoms showed themselves in one case five weeks, in a second eight, and in the remaining, several weeks after the operation. The duration of the disease was from two weeks to eight months. In one case recovery resulted, in two improvement, one patient committed suicide, in two the insanity remained stationary. The operations performed were: Castration, hysterectomy, and myomotomy. The cause of the insanity is not easy to determine. Iodoform cannot be charged with it, as it was not employed in all the cases, and was only used in moderate amount. In three cases a violent psychic or moral cause seems to have furnished the occasion of the attack.

Sänger, of Leipsic, said he believed that in such cases the patients were already diseased, and that the operations furnished only the occasion for the outbreak of violent symptoms. In three cases in which he obtained autopsies, he found in one an encephalitis, in another a hemorrhage into the pons Varolii, and in a third, exostoses upon the skull. It would perhaps be notice to thoughtful men not to operate.—*Wiener med. Presse*, June 17, 1888.

Uterine Appendages and the Sexual Appetite.

At the meeting of the British Gynecological Society, June 13, 1888, Mr. Lawson Tait read a paper on the influence of removal of the uterine appendages on the sexual appetite. He pointed out that in many respects the popular beliefs on the subject were remarkably erroneous, as, for example, that the removal of both testicles deprived a man of the power of fertilization and also of engaging in sexual intercourse. He could find no fact in support of this view; it was based apparently on a false analogy. Of course if the testicles were removed before puberty, it might be true, but it did not apply to the removal of the testicles of an adult. In animals, the desire and the power often survived, though the females seemed to "spot" the imperfection and refused approach. He only knew of one case of removal of both testicles in an adult, and in that instance sexual intercourse, after a time, had been resumed with as much satisfaction as ever, though after the first two years no emission took place. He hoped that the history of other cases of a similar kind would be forthcoming. He was convinced that the ovaries had as little to do with the sexual appetite in women as, say, the front teeth. He mentioned the cases of seven women whose ovaries had been removed while they were still virgins, and in whom, when married, no lack of sexual appetite was complained of. Still more remarkable was the evidence obtained from three young women in whom the uterus also had been removed while they were virgins. All of them gave evidence of strong sexual appetite. He concluded that, in men, the sexual appetite has not its seat in the testicles, and in women not in the ovaries, the tubes, or the uterus.

Dr. Bantock said that in several cases the women had found no difference after the operation in the matter of sexual propensity. He found that in horses it was by no means uncommon for a colt to have an erection even when castration had been performed before puberty. He had heard that eunuchs were quite capable of complete erection.

Dr. Harvey mentioned the case of a Jewess whose ovaries he had removed for severe menorrhagia, who made his life a burden by her complaints of having been deprived of sexual feeling. He said that as she did not know what had been done, her tale was probably a true one. He recalled that in India, where eunuchs are still made, it was generally held that unless a "clean sweep" was made of all the organs, including the penis, they were still capable of having intercourse.—*Medical Press and Circular*, June 23, 1888.

Intracranial Bullet-wound.

The Vienna correspondent of the *Medical Press and Circular*, June 23, 1888, says that at a recent meeting of the Imperial Royal Medical Society of Vienna, Prof. Von Mosetig showed a man, twenty-five years old, who had tried to commit suicide by shooting himself; the bullet had entered the skull through the temporal bone. On the day after the attempt at suicide the following symptoms were found to be present: Consciousness was intact; complete hemiplegia on the left side, which had supervened immediately after the shot; paralysis of the two lower branches of the facial nerve, the upper branch of this nerve being quite intact; paralysis of the hypoglossal nerve; a distinctly pronounced dorsal clonus in the right leg; epileptiform attacks of the paralyzed extremities, established on the third day after the injury. A wound the size of a pea was discovered over the right temporal bone, at about five centimetres above the zygomatic arch. Professor Mosetig wished to emphasize the fact that hemiplegia had occurred immediately after the lesion, as such motor disturbances are usually observed at a later period, when they are due to subdural hemorrhage. As no symptoms pointing to an increase of the intracranial pressure were present, Professor Von Mosetig determined on desisting from any surgical intervention, and applied a moist bandage of iodoform gauze. A bloody and serous exudation continually discharged from the wound for about five weeks. If the wound, in this case, had been permitted to heal under the formation of a dry scurf, retention of secretion and other disturbances would, no doubt, have been the result. The bladder and the intestines acted well. No disturbances of sensation or nutrition. The symptoms referred to began to improve during the course of the third week; at first, the paresis of the facial nerve, and later on the paralysis of the hypoglossal nerve disappeared; the patient began to speak. In the course of the sixth week, electrical treatment was resorted to, and the rest of the symptoms also disappeared. Ultimately only a hemiparesis and symptoms of contraction were present; moreover, a reflex athetosis or "chorea posthemiplegica" was to be observed, which supervened only when the patient began to yawn. The

tendon-reflexes were augmented and the dorsal clonus was present to a lesser degree. The patient recovered his normal speech, and the wound over the temporal bone healed up. The question arose as to the seat of the bullet. There is no doubt, he says, that he had to deal in this case with a lesion of the cerebral cortex, probably with an affection of the central lobe, so that the centres of the hypoglossal, the facial nerve, and the lobus paracentralis for the lower extremity became necessarily affected. The contraction and the "chorea post-hemiplegica" also plead in favor of a lesion of the cortex. The patient was able to stand upright for a while, but he could not do so when his eyes were closed. Professor Mosetig shares the opinion of Professor Nothnagel, and holds that any surgical intervention would be contra-indicated in this case. They might, indeed, succeed in removing the bullet, but he thinks there is scarcely any doubt that changes have already taken place on the surface of the brain which render a complete recovery highly improbable.

Tuberculosis of the Iris.

The Vienna correspondent of the *Medical Press and Circular*, June 23, 1888, states that at a recent meeting of the Imperial Royal Medical Society of Vienna, Prof. Fuchs brought before the society a case of tuberculosis of the iris. The patient, a girl, six and a half years old, had suffered from measles and hiccough, and later on she was the subject of small-pox and scarlet fever, with œdema. About four weeks after the last disease an inflammation of the eye supervened, which Prof. Fuchs recognized as being tuberculosis of the iris. Some relatives of the patient had died of tuberculosis; the patient was well-developed, and the apices of her lungs were sound. The cornea was found to be dim in the right eye, and small deposits were visible on its posterior surface. The internal part of the pupil was covered by a tumor which reached as far as the cornea, and consisted of many small nodules of a yellow-red color. Numerous blood-vessels were present on the surface of the swelling; similar nodules were also to be noticed over the rest of the iris, and even on the lenticular capsule. Prof. Fuchs remarked that he had not hitherto met with such a form of tuberculosis. This disease was usually observed under two other forms, viz., in the disseminated form where many small and gray nodules were scattered over the iris; and the second form was the conglobulated one, in which several conglomerated tubercles penetrated through the cornea and underwent a caseous process on its surface. While the disseminated form of tuberculosis, in most of the cases, is observed in both eyes, causing occlusion of the pupil, the conglomerated tubercle bears a great resemblance to a neoplasm. Virchow describes it as a granuloma of the iris, and its true character has been recognized only in modern times. As to the case under consideration, he said it was a transitory form, with a tumor which was composed of many small swellings. The patient was, moreover, affected with a tumefaction of the submaxillary lymphatic glands of the right side. The case was to be considered, he said, as one of primary tuberculosis of the iris. Prof. Fuchs was of opinion that the affected eye ought to be removed in order to avoid general tuberculous infection.

Microbes in Skin and Suppuration.

Dr. V. A. Kryloff, who has been investigating the causes of acute suppurative processes, has obtained some interesting results by rubbing antimonial ointment and croton oil liniment into shaved patches of the skins of different animals. When these substances were rubbed into the skin of guinea-pigs and rabbits, no pustules, as a rule, were produced; but by means of very energetic rubbing a dry gangrene of the skin was caused, in which no micro-organisms were to be found—a condition apparently due to an absence of pyogenic organisms in the skin of these animals. In one case, however, there was pustulation, and staphylococcus aureus was found. When a similar experiment was tried on dogs, pustulation always followed, and staphylococcus pyogenes albus was invariably found; this coccus existing, as it would seem, in the skin of the dog, otherwise it would be difficult to explain why other staphylococci were not found. Cultures were also prepared from the normal skin of dogs which, injected into other animals, produced abscesses, and in the case of rabbits proved rapidly fatal. The conclusion that Dr. Kryloff comes to is that the production of pustulation by external irritants depends, in part at least, on the presence of pyogenic organisms in the skin. In the case of dogs, he thinks that they must be localized in the deeper layers of the epidermis, as thorough disinfection was a very difficult proceeding; and unless the organisms lying deeply were destroyed, their power of provoking suppuration was not arrested.—*Lancet*, June 9, 1888.

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CHLOROFORM AS AN ANÆSTHETIC.

Dr. Chisolm's recent paper, "*A Very Valuable Lesson for Those who use Anæsthetics*," brings up not only the question of the proper treatment of suspended animation from anæsthetics, but also that of the choice of an anæsthetic agent. Dr. Chisolm estimates that chloroform has been administered under his charge at least ten thousand times, without a death. Four cases of suspended animation have occurred in this series, which were successfully treated by the method of Nélaton—suspension of the patient by the heels. The detailed account of these four cases adds convincing testimony to the value of this plan of treatment. Dr. Marion Sims, in *The Story of My Life*, gives a graphic account of a similar successful case in which the treatment was supervised by Nélaton himself: three times were the functions of the heart and lungs restored by suspension, and as often they failed when the supine position was resumed. "It is the horizontal position which is fatal in chloroform-poisoning," Dr. Chisolm says, and adds: "I feel convinced, from my own experience with this invaluable method, that many of the dead from chloroform might have been resuscitated had the surgeon hung up immediately by the feet the inanimate body, instead of wasting time in applying hypodermic injections, cold water splashing, spanking, fanning, electricity, or even attempts at artificial respiration. . . . Do any or all of these things if you will, but hang up the patient first, and that instantly, as soon as the heart and lungs fail." The method is equally applicable to the lesser grades of heart-failure, and to the same conditions when brought about by ether.

The method of treating obstructed pharyngeal breathing employed by the author is deserving of especial emphasis because of its practical importance. "Should snoring occur," he says, "indicating some difficulty in pharyngeal breathing, the chin is drawn forcibly upward. This elevation pulls the anterior wall of the pharynx, with the byoid bone and root of the tongue, forward, making for the air a clear and straight passage from the nose into the lungs. By this movement of the chin, respiration becomes immediately quiet and easy. The pulling-up of the chin is a much more efficient means of pulling the root of the tongue forward than by pulling out the tongue with the forceps, as is recommended by some surgeons. It is not always easy at this stage of anæsthesia to get into the mouth, as the lower jaw-muscles may not be relaxed. A proper tongue-forceps is not often at hand, and to tear the tongue-substance with sharp-toothed and yet slipping instruments, with the soreness and swelling which subsequently follow, is an abominable practice which should be abolished. The patient's chin and your own hands are always present, and it only

needs knowledge of the method to apply it, and to secure prompt and speedy relief."

The belief has been growing stronger of late that ether is not so safe an anæsthetic as has been supposed. Emmet, about 1865, had a death from ether anæsthesia. The woman was suffering from cystitis and pyelo-nephritis. After this death, he established the rule in the Woman's Hospital that the urine of all patients should be examined prior to etherization. He states that he has had five other cases of fatal suppression of urine where this rule was neglected by his assistants. It is a clinical fact which has been long recognized that persons with certain diseases of the urinary organs do not stand operations well. Especially is this true of persons with surgical kidney. They die shortly after operation from anuria with uræmia. It has been supposed that death is due to shock from the operation; but it is now known that the principal cause is irritation of the kidneys with ether. Reports of serious illness and death from ether-uræmia have not been rare in the last few years. So real is this danger, that some of the most conservative surgeons in America have abandoned ether as an anæsthetic. There is unquestionably a strong reaction against the dictum that ether alone shall be used for the production of anæsthesia in surgical practice, and a desire that the relative indications for the use of chloroform be better defined. While professional opinion is not yet sufficiently crystallized for dogmatic assertion, yet it is quite well established that ether is badly borne at both extremes of life (since it is apt to set up a bronchitis, or to intensify one already present) and by chronic drunkards; and that it is very fatal in cases of fatty heart and of nephritis. Chloroform, on the other hand, is well borne by the young and the old, by pregnant and parturient women; and it is not known to have any irritating effect upon the kidneys. It is almost universally recommended in tracheotomy. Deaths from chloroform generally have been among adults. Deaths have occurred during the administration of chloroform, where there was reason to believe that fear of the anæsthetic was the cause of the fatal result.

In the present state of our knowledge, the use of chloroform for the production of anæsthesia is justifiable during labor, in persons suffering from acute or chronic disease of the kidneys, in tracheotomy cases, and in the young and old, especially when they are suffering from bronchitis. Ether should not be given to persons suffering from diseased kidneys.

A DANGER TO THE CHILDREN.

We have already, in the REPORTER, called attention to certain sources of danger to the health of the young—not strictly medical—which we think it right for physicians to notice, and so it will not excite much surprise if we step a little aside from the usual and beaten track of medical journalism to point out another source of danger which sometimes comes in a most alluring and seductive form. We refer to the stories and illustrations contained in many of the periodicals published ostensibly for the good of little mankind. We do not in this refer to those despicable sheets published plainly with no other object than to get money by appealing to the coarse and rude part of children's nature. These are too gross to require our condemnation. We refer now rather to those which bear the imprint of well-known and highly respected publishing-houses, and which have a laudable purpose mixed with the entirely proper design of making money.

Some of the very best of these seem to overlook one possible effect on children of the thrilling stories they contain, or of the blood-curdling pictures which illustrate them. It has not been six months since we called attention to an instance in which the paper called *Wide Awake* erred in this respect (since which, by the way, we have ceased to receive it), and now we call attention to what we believe to be a defect in that otherwise excellent periodical, *Harpers'*

Young Folks. This paper is in many respects so admirable that we regret to find it publishing stories in which the moral is brought in at the expense of a suggestion of immorality, and in which escape from danger is made the more striking by too graphic a description of the danger itself.

The effect of this sort of thing is so injurious to the bodily and mental health of young children, that we think it quite within the province of a medical journal to call attention to the fact. It is a great pity that a paper published for children should be of such a character that a parent cannot place a copy of it in the hands of his little ones without cutting out some of the pictures, or charging the nurse that she must not read certain of the stories—or parts of them—to the children. Yet this is precisely the case with *Harpers' Young Folks*, and we should regard any parent as careless of the mental development of his children who would let it come into their hands without carefully examining each copy to see if it were fit for them, in respect to the matter we are discussing.

No one can tell what horrors of night, and what torments of daily terror, are caused by the things with which some persons entertain children. Recollection of one's own experience, and observation of the experience of the present rising generation might convince the least observant that this is no fancy or prejudice which we urge upon their notice, and we would be glad to know that what we now say had the effect of riveting the attention of those who make books and papers for the young, upon the opportunity for harm which they present together with their opportunities for good. We have no doubt that the publishers of *Wide Awake* and of *Harpers' Young Folks* give much thought to the latter, but we fear they have sometimes overlooked the former. For this reason, and with a full appreciation of the good they have accomplished in certain directions, we call their attention, as well as that of our readers, to a matter which, in our judgment, calls for amendment.

A DETAIL OF COLOTOMY.

An interesting discussion has arisen lately in Germany in regard to the value of a step in the operation of colotomy, which was described by KNIE, of Moscow, in the *Centralblatt für Chirurgie*, May 5, 1888. The method suggested by Knie has been practiced by him only on dogs. It consists in opening the abdomen transversely in the region of the transverse colon, sewing the peritoneum to the edges of the wound in the belly-wall, drawing out the colon, making an opening through the mesocolon with a blunt instrument, and closing the abdominal wound with two or three stitches, which are passed through the opening in the mesocolon. The effect of this is to have a portion of the colon wholly outside of the abdomen. This loop is to be carefully stitched at each side to the edge of the (now) two abdominal openings, after which it is to be immediately incised, excised, or let alone for awhile, as the circumstances of each case may demand.

This ingenious method has attracted so much attention as to call forth articles by Maydl, of Vienna, and by Lauenstein, of Hamburg, in which they show that they had, previously to Knie's communication, performed operations essentially the same in principle. Maydl describes a number of operations in which he practiced his method, which consists in opening the abdomen at any suitable point, drawing out a loop of intestine, making an opening through the mesocolon, or mesentery, passing a piece of iodoform gauze through this, and stitching the loop of intestine to the parietal peritoneum, and its two parts together below the gauze. Lauenstein describes two operations on human beings, in which he had already done exactly what Knie afterward suggested, with the exception that he closed the abdominal wound by sutures, which simply passed through the mesocolon, so that no formal opening was made in it. In speaking of his operations, Lauenstein properly calls attention to the fact that they were founded upon

the experiments of Panum, reported in 1885, on the behavior of loops of intestine which had been fastened outside of the abdominal cavity.

The method of Lauenstein seems to be, of those suggested, the one best suited for operations upon any movable part of the intestinal canal, while that of Maydl may be more suited to operations close to the rectum. The important feature of all the methods we have described is that they enable a surgeon to secure a portion of intestine wholly outside of, and shut off from, the general cavity of the peritoneum, upon which he may carry out further operative procedures at once, or after the lapse of a considerable interval. This is a matter of so much importance that it might make the difference between operating or not operating at all in many cases. The possibility of having an extra-peritoneal portion of the bowel still nourished by the vessels of its mesentery, and capable, as Panum has shown, of maintaining its vitality and adapting itself to its unnatural situation, must encourage surgeons to operate in cases which, but for this, would be beyond assistance.

The question of priority involved in the discussion alluded to is not important and seems easy to settle; but it is, perhaps, proper to say that, in general, Lauenstein's method is not only the simplest, and easiest to execute, but also the most scientific and most promising. It is a fortunate thing when all these elements are to be found in a single method.

LOCAL SUN-BATHS FOR HYDROCEPHALUS.

Among the methods recommended for the treatment of chronic hydrocephalus in infants is one cited in the *Wiener med. Presse*, June 10, 1884. It was proposed by Somma, and has been employed by him in five cases with good results. The method consists in exposing the bare head of the child to the direct rays of the sun for half an hour at a time for four or five days, and afterward for periods gradually increasing to forty or fifty minutes until a month has elapsed. When the treatment is applied, the child's face must be turned away from the sun.

If it were not for the fact that chronic hydrocephalus is a disease so rebellious to treatment that almost any suggestion is acceptable, we would hesitate to place this one of Somma before the readers of the REPORTER. But in no case does the adage "any port in a storm" apply more forcibly than in the treatment of chronic hydrocephalus; and so we overlook the somewhat confused explanation of the *rationale* of his method given by Somma, and bring this method alone to the attention of our readers in the hope that it may be more useful than its explanation is clear.

TREATMENT OF HEAT FEVER.

The principles upon which a case of heat fever should be treated have been practically settled since the publication of Dr. H. C. Wood's researches on the subject. It is of decided advantage, however, for the practitioner, besides knowing these principles of treatment, to have an efficient and simple method of applying them. Such a method has been described by DR. F. A. PACKARD, in his report of thirty-one cases of heat fever seen by him while resident physician at the Pennsylvania Hospital, during the summer of 1887 (*American Journal of the Medical Sciences*, June, 1888). In every summer a large number of cases of heat fever are brought to the Pennsylvania Hospital, and the treatment adopted there is the result of years of experience. During the time of Dr. Packard's experience, as soon as a patient with heat stroke was brought to the hospital, he was placed on a waterproof fracture-bed (which was kept under a tent in the open air), his clothing was removed as quickly as possible, a thermometer was introduced into the rectum, and ice was packed about the body and extremities. As a rule, fifteen or twenty minims of

tincture of digitalis were administered hypodermically. The thermometer was removed and examined every seven minutes, the icing being continued until the temperature fell to 104° F. The patient was then dried and put on a clean bed, with an ice-cap applied to his head. The icing was not continued after the temperature in the rectum had fallen below 104° F., because experience showed that if continued after that time the fall in temperature was too rapid and great, and a condition was brought about which required the application of external heat and free stimulation.

In cases in which the initial temperature was only 106° F. or under, it was found sufficient to strip the patient and sponge him liberally with a mixture of one part of alcohol and four parts of iced water, applying at the same time an ice-cap to his head. In addition to this routine treatment, other means were employed to meet individual symptoms in various cases. Thus, when convulsions occurred after the temperature had been lowered to a considerable extent, morphia was administered, and usually with good effect. Again, when the respiration and pulse failed to improve in character with the fall in temperature, the patient was bled in spite of the feeble pulse. This almost invariably produced quieter, fuller respirations, with a soft steady pulse. It was generally necessary to bleed from the arm, the blood being so thick that it had to be squeezed out by stroking the arm up from the hand. The loss of twelve or sixteen fluidounces of blood sufficed to bring about marked improvement.

From the experience in the Pennsylvania Hospital, the essential points in the treatment of heat stroke may be summarized as follows: Put the patient in the shade, where there can be as free a circulation of air as possible; strip him, and, if the temperature is above 106.2°, apply ice to the body until the temperature falls to 104°; then dry the patient and put him to bed with an ice-cap to his head. If convulsions occur at this time, use morphia; if the circulation and respiration do not improve with the fall in temperature, bleeding may be employed.

In addition to these practical and easily-remembered rules for the treatment of heat fever, we would remind our readers of a suggestion made by Dr. Morris J. Lewis in the MEDICAL AND SURGICAL REPORTER, August 6, 1887, that the physician would do well to carry with him a watery solution of antipyrine, two drachms to half an ounce, and administer at once twenty minims (ten grains) hypodermically, in order to bring about an early fall in temperature before other means can well be effective.

ANOTHER MEDICAL AND SURGICAL REPORTER.

We call the attention of our contemporaries, and of our readers, to the fact that a journal has been started at Toledo, Ohio, which has adopted the name of the *Medical and Surgical Reporter*. This is a mistake which we trust will be at once corrected; because our amiability can hardly be stretched so far as to approve of the appropriation by another journal of a title which owes whatever worth it has to the long career and success of the MEDICAL AND SURGICAL REPORTER of Philadelphia.

CORRESPONDENCE.

Official and Officinal.

TO THE EDITOR.

Sir: Would you please answer the following in THE MEDICAL AND SURGICAL REPORTER?

Prof. Bartholow says any drug recognized by the U. S. Pharmacopœia is *official*, and drugs kept in the shops *officinal*. He uses official exclusively in his work on Materia Medica. I cannot find any authority that sustains him. By answering the same fully you will greatly oblige

Yours truly, READER.

Reading, Pa., July 3, 1888.

[Dr. Bartholow is right—"Official" is what is sanctioned by the Pharmacopœia; "Officinal" is what is sold in the shop, or "*Officina*." Editor of REPORTER.]

Snake-Bite.

To the Editor.

Sir: Reading an editorial in the Medical and Surgical Reporter of June 9, 1888, upon "Snake-Bites," induces me to send you this. Having had a large experience in treating snake-bites, I am led to the conclusion that whiskey possesses no antidotal properties over the virus of the snake. It is simply given because it is popular. The poison of the snake, bee, wasp, spider, &c., is an acid. Whiskey has no alkaline properties, hence it is no antidote. That I may be understood, and for illustration, say that it takes gr. 1/8 of strychnia to destroy life, and if a man swallows this quantity, unless some antidote is used to destroy the effects of the poison, he will die. If the poison is neutralized before it does its deadly work, the man will recover. It is very evident that if it took one-eighth of a grain to kill a man, one-tenth of a grain would not kill. The man who has taken one-tenth of a grain will get well without any treatment. Now if it takes of the poison of the snake two grains by weight to kill, it is sure that one grain will not kill. If two grains enter a vein and are carried directly to the heart, they will produce paralysis of the heart, and the patient will die before an antidote can be given. If one grain enters the vein, and is carried to the heart, it will not kill, because it takes two grains to kill. We demonstrate this theory in our practice every day. We give our patients gr. 1-60 of strychnia; they do well.

Now we see why it is that whiskey is the universal remedy for snake-bite, and why so many believe it is infallible, when the truth is, the patient would have gotten well and been saved the intoxication.

I do not give whiskey in snake-bites. My theory is, that I have an acid poison to deal with, hence I give alkalies—spirits of ammonia, with a prompt emetic. The permanganate of potash is good, just in proportion as it neutralizes the acidity of the poison, and it is always well to support the heart's action with digitalis.

Yours truly, J. C. Milner, M.D.
Comanche, Texas,
June 19, 1888.

—Sir Morell Mackenzie declares that for the present he is debarred from answering the charges made against him by the German doctors, though he is preparing his own report of the disease of the late Emperor Frederick, and hopes to obtain permission to publish it later on.

Notes and Comments.

Drug-Stores in Germany.

A correspondent, writing from Dresden, says: "The drug-stores have a curious way here of shutting up just about the time you want them. And as soon as it begins to grow dark, down go the shutters; and if you need anything, you go to a little bell-handle outside of one of the iron shutters, and ring it. Then you hear some one at a crank inside; the massive frame rolls up, and a head looks out of the window. Finally the man or boy inside opens part of the window, and you talk through a pane of glass and make known your wants Instead of getting angry at being aroused, the man begs your pardon for keeping you outside and says: "I thank you for your order." If you have not the exact change, and the man inside is in the same predicament, he will beg you most politely, and thank you, to allow him to change it. Having done so, he will thank you for calling (evidently taking the visit as a social one), bow, close his little peep-hole, bow again, and then smile sweetly as he grinds down his iron shutter, and his smiling face is lost to view. How different from the druggists in America! I remember I once woke one up in the States, and he came downstairs with a shot-gun after me. But, as I remarked before, they have a curious way of doing things in Dresden."—*Phila. Ledger*, June 12, 1888.

Professional Secrecy Enforced.

The *Chemist and Druggist*, June 23, 1888, states that the Besançon court of appeals has just decided an interesting case in accordance with well-settled jurisprudence. Dr. Z., the director of a private hospital, published some time ago an advertising pamphlet relating at length the case of a Mme. X., a patient of his, who was, he alleged, suffering with monomania, but since then escaped from the hospital. About eight hundred copies of the pamphlet were circulated, in which the patient's identity was alluded to pointedly enough to be easily recognized; whereupon the State attorney, although no one had complained, prosecuted the doctor for a violation of the section of the Penal Code enjoining professional secrecy upon physicians, pharmacists, and midwives. The first sentence was two hundred francs fine and two thousand francs damages. Not satisfied, Dr. Z. appealed, and for his pains the Besançon court has maintained the damages, raised the fine to five hundred francs, and seasoned the whole with a scathing rebuke.

Religio Medici.

The Union League Club resolutions on the death of Dr. Agnew, prepared by Chauncey M. Depew and presented by Sigourney W. Fay, contain the following: "If all Christians were like Dr. Agnew, all men would become Christians. With him, religion was not a cloak, but a career; it was not a formula, but a faith; it was not alone a liturgy or a creed, but the practice during every working-hour of the commandment 'Thou shalt love thy neighbor as thyself.' The profession was not only enriched by his genius and science, but thousands of young men owe to him the opportunities and examples which will enable them to take up his work and follow in his steps. The loss of such a man in the prime of life and usefulness is a public calamity, only mitigated by his good works while living and his glorious memory after death." —*Boston Med. and Surg. Journal*, June 7, 1888.

A Possible Source of Infection.

To obstetricians, who need to be constantly on the lookout for possible sources of puerperal septicæmic infection, the report of the following case is interesting, as revealing a somewhat unusual, or at least unexpected, source of danger. It is sent to the *British Medical Journal*, June 9, 1888, by a correspondent:

"A few months ago," he states, "I confined a woman of her seventh child. Immediately after birth she developed unmistakable signs of so-called puerperal fever, which rapidly terminated in death. During and after the confinement, I carried out the strictest antiseptic treatment. Part of the *post-partum* treatment consisted in washing out the uterus with an antiseptic twice daily; for this purpose I used an ordinary Higginson's syringe, with large catheter attached. The catheter I provided myself, taking care to use one which had never been used for any purpose before. The syringe my patient provided me with was a new one. At the termination of the case I advised my patient's friends to burn the syringe and the catheter, this being, I thought, the surest way to prevent the possibility of subsequent infection from their being given out on loan. Quite recently I learned upon inquiry that the catheter had been burned, but the syringe had been 'returned to the chemist' from whom it had been borrowed at a moderate charge per diem. The poorer classes are, it appears, in the habit of borrowing syringes in this way, and one at least of my professional neighbors sends his patients to the chemist to hire one when he finds they cannot afford to purchase. It is not difficult to see how, under these circumstances, puerperal septicæmia may be spread. I bought from the chemist one of the two syringes he keeps on hire; the other he told me had not been returned. 'Indeed,' he added, 'I lose on an average one in the month.' Although I put the one I secured beyond the possibility of future harm, unfortunately it is impossible to identify it as the one I used some months ago, which means that the stolen one is at large, possibly carrying with it puerperal septicæmic influences."

We have never in this country heard of druggists who kept syringes or any other instruments for hire; but what has occurred in England may occur here. A word to the wise is sufficient.

New Operation for Incontinence of Urine in Women.

At the meeting of the British Gynecological Society, April 25, 1888, Dr. William Alexander read a paper on this subject, in which he said that the first case he operated upon was a woman belonging to the theatrical profession, who often had to retain her urine for unduly prolonged periods of time. This ultimately determined a paralysis of the sphincter of the urethra. To remedy the distressing effects of this condition of things, various methods of treatment were employed, but in vain, and ultimately he dissected out the urethra and led it into the rectum, hoping to utilize the rectal sphincter for the retention of urine. At the third attempt he succeeded, and the patient was much relieved. He also read the notes of two other cases on which he had operated for vesico-vaginal fistulæ by closing the vulva and carrying the urine into the rectum.—*Medical Press and Circular*, May 2, 1888.

Aromatic Vinegar for Disinfecting Sick-rooms.

The *Chemist and Druggist*, June 23, 1888, gives the following formula:

Camphor	ʒj
Oil of cassia	fʒj
" pimento	fʒj
" bergamot	fʒj
" cloves	fʒj
" lavender	fʒij
Acetic acid	fʒiij
Rectified spirit	fʒiij
Glacial acetic acid to	fʒxvj

Mix.

Mr. Depew on the Doctor.

We learn from the *Medical Record*, June 23, 1888, that Mr. Chauncey M. Depew, in his address before the Syracuse Medical College, spoke as follows concerning success in the doctor's life:

"I have no faith in mottoes, or maxims, or rules for success, and, though often asked, never have any to give. A young man who has good health, and governs his conduct by a conscientious answer to the ever-present question Would my mother approve? and gives tireless attention to his business, is certain to succeed. It is impossible for every one to win fame or fortune, or both; but the man who earns a living, even in a very modest way, feels the inspiration of independence, and has safely passed the precipice of failure. Repinings for riches and angry envy of prosperity weaken the moral tone and mental fibre. They paralyze effort, and end in empty vaporings in the bar-room and empty larders at home. The opportunities for accumulating large fortunes rarely come to members of the liberal professions. Their compensations are in the position and influence accorded to their culture and training. With them self-support is success, and when the surplus surely comes, and with it home, larger comforts, and fair competence for declining years, they enjoy a measure of happiness and content rarely found with the use and care of great wealth."

Successful Operation for Stenosis of the Pylorus.

The *Medical Record*, June 23, 1888, states that Loreta's operation, or digital divulsion of the pylorus for stenosis, with dilatation of the stomach, was performed June 11 by Dr. William T. Bull at St. Luke's Hospital, New York. The patient, a man thirty-seven years old, had suffered for twenty months from daily vomiting, pain, acid eructations, and heartburn, and was much reduced in flesh, despite treatment by lavage of the stomach, careful diet, and internal remedies. The fluids of the stomach were thoroughly investigated chemically by Dr. F. P. Kinnicutt, and the diagnosis of stenosis from cicatricial contraction of an ulcer arrived at. The operation confirmed the diagnosis, the pyloric orifice being found so small as to admit only a bougie of a diameter of three-sixteenths of an inch. Through a wound two inches long near the pylorus, the orifice was stretched gradually with bougies and the fingers till it was over two inches in diameter. No accident followed the operation, and the patient may now (June 19) be considered out of danger. There has been neither pain nor vomiting, though for several days considerable quantities of liquid diet have been taken by the mouth. A full report of the case will be presented at the October meeting of the Practitioners' Society. This is the first successful case of this operation yet reported in this country.

The Effect of Ergot on the Involution of the Uterus.

This has been carefully studied by Drs. Herman and Fowler, of England, and in a paper before the London Obstetrical Society they report two sets of patients—one set (58 cases) treated with ergot for a fortnight after labor; the other set (68 cases) given a single dose of ergot after labor, and no more. In the first set of patients the uterus diminished more rapidly in size than in those in which only one dose was given. As to the effect on the duration of the lochial discharge they did not find that the ergot treatment produced any appreciable effect.

Dr. Boxall, before the same society, contrasted two series of cases, each referring to one hundred patients. In the first series, ergot was given three times daily during the first three days after labor; in the second, ergot was omitted. His observation is that the practice of giving ergot during the days subsequent to delivery tends to prevent the formation of clots and to hasten their expulsion, and to diminish the frequency, intensity, and duration of after-pains.—*Practice*, March 15, 1888.

Naphthaline in Purulent Ophthalmia.

At the meeting of the Biological Society of Paris, May 19, 1888 (*Bulletin Médical*, May 23, 1888), M. Budin stated that he had employed naphthaline in two cases of purulent ophthalmia, in conjunction, however, with nitrate of silver, as he did not feel justified in using it alone. He first made one application of a solution of nitrate of silver to the eyes, and followed it with applications of a saturated aqueous solution of naphthaline. This he did for three days, and then discontinued the former. He recognizes the fact that the number of observations has been too small to draw trustworthy conclusions from, and yet the usual duration of the suppuration was so much shortened that he thinks the usefulness of the remedy should engage attention, and its proper mode of employment be learned by trial.

How to Administer Sulphonal.

The *Chemist and Druggist*, June 16, 1888, in an article on sulphonal, states that the sparing solubility of sulphonal is one of the chief difficulties which have to be dealt with in dispensing the remedy. It is placed on the market in the form of small white crystals, which powder easily, but the resulting powder mixes badly with water. Were there not this objection, the best form of dispensing sulphonal would be as powder, for, the dose being comparatively large (15 to 60 grains), pills are out of the question. The patient might, however, take a powder dry on the tongue and wash it down with water, or, better, it may be taken in rice-paper. In mixture, the drug requires the addition of something viscous to suspend it, otherwise the powder rises to the surface of the liquid as soon as agitation ceases. For a draught it advises the following formula as suitable one:

Sulphonal	gr. xxx
Syrup	
Mucilage of acacia	āā ʒ ii
Distilled water	ʒ i

Powder the sulphonal, and mix the syrup with it in the mortar, then the mucilage diluted with three fluid drachms of water. Wash out the mortar with the rest of the water. Dr. Lovegrove recommends compound tragacanth powder for suspending sulphonal, and this may be used if the viscosity is not objected to. The remedy makes a good pill with glycerine and tragacanth, but, as already stated, the dose renders this form of administration objectionable.

Sulphonal is practically tasteless, the extremely slight bitter after-taste of the aqueous solution being observable only to those who expect it, and not to the ordinary patient.

The Disinfection of Bedding and Clothing.

The *N. Y. Medical Journal*, June 16, 1888, says that in Paris the importance of destroying micro-organisms in every shape and wherever found seems ever increasing, as shown by the effort lately made in this direction by the directors of the great government loan offices called the *Mont de piété*. A large number of the poor classes pawn their bedding, and all sorts of mattresses, pillows, and other articles are received at the loan offices and placed in the storehouses, and, when we know that one of the number may be contaminated with the germs of some disease, and transmit it to the whole lot and cause an epidemic, as has been proved, the importance of disinfection of these goods will be recognized. It is only too common in all countries to see poor people, after a long illness, compelled to pawn their goods; and our local law-makers, together with those interested in hygiene, may see their way to purifying these goods or insisting that the pawn-shop people do it, by the means used in Paris. This is by superheated steam. A large cylinder to put the goods into is mounted on wheels, looking for all the world like a steam boiler or a fire-engine. This can be drawn by a horse wherever it is wanted, as was done lately during an epidemic of sweating sickness in the country, and the goods are placed in it for disinfection. During the few months that this plan has been working, thousands of old mattresses, pillows, covers, and clothes of all sorts have been steamed, and it is beyond question that millions of the invisible and dangerous microbes have been destroyed, and that another great step has been taken toward the millennium of cleanliness, and therefore of health, in modern cities.

This plan for public disinfection has already been referred to with commendation in an editorial in the REPORTER, June 30, but the subject is of sufficient importance to deserve urging even by repetition.

Marine Station for the University of Pennsylvania.

The Biological Department of the University of Pennsylvania is about to establish a station for original research and for instruction in forms of marine life. It is stated that a gentleman interested in this study is to give a large sum of money to the University for the endowment of the station, which will probably be in operation next summer.

It is said that the present plan does not look to the fixing of a permanent site for the station until, from a number of years' varied experience, the best spot has been found. It is proposed to get a large schooner, to fit it up with a steam pump, the ordinary laboratory equipments, etc., and to move in it from place to place. The students can either use the vessel as a means of conveyance, or meet it at the point which has been selected as the temporary station.

Professor Dolley, of the Biological School, is to go abroad to study next summer, and will visit, among other places, the great marine station at Naples, where he was a student some years ago.

NEWS.

—The New York Polyclinic is to have a spacious hospital in immediate connection with the college.

—Small-pox is epidemic in the town of Preston, about thirty-five miles north of Liverpool, England.

—There is said to be a genuine case of leprosy in Le Grande, Iowa, the victim being a young Norwegian.

—The tenth regular meeting of the State Board of Health of Pennsylvania was held in the Supreme Court Room at Harrisburg, July 11.

—The number of cases of small-pox at Havana, Cuba, is diminishing. Of a total of 498 deaths during the month of June, only thirteen were from small-pox.

—A committee has been appointed by the British Medical Association to investigate the effects of different occupations and employments on the physical development of the human body.

—The Government Health Reports state that Plant City, Florida, has again become infected with yellow fever. There were two deaths in June. Active measures have been taken to isolate the town.

—The Benevolent Fund of the British Medical Association has had large demands upon it, and its balance is very low. The *British Medical Journal*, July 7, makes an urgent appeal for subscriptions to the fund.

—The Paris authorities are now using coal-gas to kill the vagrant dogs which fall into the hands of the police. They are crowded into a closed box containing the gas, and in three or four minutes their dead bodies can be taken out.

—"The man without a larynx," who has been an object of curiosity to the Paris doctors for some time, recently died in attempting to remove, cleanse, and replace the canula in his throat himself, instead of going to the Saint Louis Hospital, as he had always done before.

—The *Boston Medical and Surgical Journal*, July 12, 1888, says that the Board of Health of New York City, on the 29th of June, appointed forty-one physicians for the special summer service of the Department. They are engaged for two months at a salary of $100 per month, and each physician is expected to spend at least eight hours a day in visiting the tenement-houses of his district. This work is under the direction and supervision of Dr. Moreau Morris.

HUMOR.

"MISTER," HE PLEADED, "I have lost a leg, and—" "Yes, so I see. It's mighty provoking to lose anything. I lost a dog once that I had often tried to give away, but I was mad about it just the same."—*The Epoch.*

"NO," SAID THE HOUSEMAID, "I don't apologize to a man when I throw a bucket of water down the front steps to wash 'em, and he comes along and gets drenched. I've tried apologizing, but I've found there's nothing you can say to a man in that case which will satisfy him."—*Scranton Truth.*

WIFE (WHO HAS THE FOREIGN-LANGUAGE "spasm"): "John, do you know, I'm getting on splendidly with my French. I am really beginning to think in the language." Husband: (interested in his paper)—"Is that so? Let me hear you think a little while in French."—*N. Y. Sun.*

FEARS RELIEVED.—Office-boy (to country editor): "Man outside, sir, wants to see the editor." Editor (anxiously): "What does he want of the editor?" Boy: "Says he wants to mop the floor with him." Editor (relieved): "Oh, show him in. I was afraid it was somebody come to stop his paper."—*Life.*

OBITUARY.

J. MILNER FOTHERGILL, M.D.

Dr. J. Milner Fothergill, whose name has become familiar to American readers through his books and his articles in medical journals, died June 28, of gangrene of the foot, which occurred as a complication of diabetes, from which he had been a sufferer for many years. He was born April 11, 1841, in the village of Morland, Westmoreland. His father was a physician, and so were several others of his ancestors. He was graduated from University of Edinburgh in 1865.

In 1872, he wrote his first book, on "The Heart and its Diseases, with their Treatment." This at once secured for him a wide reputation, and a second edition was published in 1879. His later writings were devoted for the most part to diseases of nutrition. He was a bold and fearless writer, and rather challenged than feared criticism. His style was graphic and racy, charming one almost into forgetting his faulty logic, supported as it was by dogmatic assertion.

Dr. Fothergill was married in 1880, and leaves a widow but no children.

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Clinical Lecture.

URETHRAL FEVER.

BY G. FRANK LYDSTON, M.D.,

LECTURER ON THE SURGICAL DISEASES OF THE GENITO-URINARY ORGANS AND VENEREAL DISEASES IN THE COLLEGE OF PHYSICIANS AND SURGEONS, CHICAGO, ILLINOIS.

(Reported by William Whitford, M.D.)

Gentlemen: The greatest discrepancy exists in the statements of various authorities with regard to the pathology of the polymorphous disease known by the various terms of "urethral, urinary, and urine fever." This I firmly believe to be due to the fact that these terms are applied in a haphazard manner to several distinct types of disease consequent upon diseases of, and operations upon, the genito-urinary apparatus; and I am positive that a careful survey of the clinical evidence upon the subject will bear me out in my opinion. Urethral fever, as the term is ordinarily used, is, so to speak, an omnibus which comprises a series of widely-varying phenomena following chronic disease or accidental or surgical trauma of the genito-urinary tract. Fallacious as the nomenclature of these phenomena may seem to be, we are compelled to select some term by which they may be recognized. The term "urine fever," as suggested by Reginald Harrison, is, perhaps, the most accurate. Unfortunately, however, even this term is suggestive only of one element which may act as a causal factor in the production of the morbid phenomena which we are about to consider. Harrison has adopted this term because of his opinion that the so-called urethral fever is invariably due to morbid changes in the urine at the site of injury, these morbid changes giving rise to the development of toxic materials, which, when absorbed into the circulation, are always inimical to health and often productive of a fatal result. Whatever the cause or causes of urethral fever—and this we will consider later on—the subject is one of the greatest practical importance to the surgeon, for the various phases of this disease constitute the principal danger of operations or injuries upon the urethra, prostate, and bladder.

From a clinical standpoint, I believe that we are warranted in dividing urethral fever into six forms, these forms, however, being capable of demonstration only in typical cases in each instance. They may merge one into the other, and are all secondary to genito-urinary operations, chronic disease, or injury.

1. This first form, which is by far the simplest, consists of a nervous rigor, which is not succeeded by fever, and which follows, within a comparatively short time, operations or injury. This nervous disturbance is, in all probability, due to slight surgical shock, with a resulting vaso-motor disturbance of the peripheral circulation.

2. Traumatic or surgical fever, due to the same causes, and dependent upon excessive reaction from surgical shock. This form of fever is quite apt to be modified by a varying degree of septic infection.

3. Toxicæmia following severe shock, with a resultant perverted elaboration of the urinary secretion and the formation of organic poisons similar to the vegetable alkaloids. Associated with this we have reflex inhibition of the functions of the kidney with its attendant uræmia. This we

may term the typical form of urethral fever. It is sometimes complicated by convulsions.

4. Classical septæmia, which may prove fatal within a short time, or may merge into the pyogenic form of septæmia (pyæmia), with its characteristic circumscribed and diffuse suppurations in the various organs and tissues of the body.

5. Chronic urinary fever attendant upon obstructive diseases of the urinary organs.

6. Cases of a mixed type, which combine in varying degrees elements of the first four forms of the disease.

If the above classification is correct, there is little wonder that the opinions of various authorities in regard to the pathology of urethral fever vary so widely. There must be some explanation for the fact that one authority claims that these varying phenomena are invariably septic; another, that they are due to ammoniacal decomposition of urine and subsequent absorption of the product; another, that they are due to simple uræmia; and last, but not least—and of this theory Reginald Harrison is the principal exponent—that they are due to obscure changes in the urinary secretion, and the formation of new, and as yet unisolated, toxic compounds. It is evident to every practical surgeon that none of these causes is sufficient to explain all of the cases of so-called urethral fever. Simple absorption of healthy urine certainly will not cause the disease, nor, as has been shown by Dr. Keyes, will it produce even simple suppuration when introduced into the cellular tissue by hypodermic injection. We do know, however, that urine in a state of decomposition is possessed of most powerful propensities for evil; in fact, there is hardly any organic substance with which I am acquainted that is so inimical to the vitality of cellular tissue. The experience of our best surgeons in cases of urinary extravasation will bear me out in this assertion. Now, there is a close resemblance between the effects of extravasation of decomposing urine and those of the poisons of erysipelas, of dissecting wounds, or even the bite of venomous reptiles, as far as their effects upon the vitality of connective tissue are concerned. It is obvious to anyone, who stops to consider for a moment, that there must necessarily be, in all cases of injury or operations upon the urinary organs, pronounced danger of septic infection. The injury, or the site of the injury, is usually such that free drainage is impossible. Decomposing urine is usually present, and is productive of more or less death to connective and cellular tissue, and there are always present the conditions of heat and moisture. Such an environment, as you doubtless are well aware, is peculiarly favorable to the development of those minute organisms upon which septicæmia is supposed to depend.

None of the explanations which have been given will, when taken alone, explain the fatal result which has been known to occur from the simple introduction of a smooth staff into the urethra.

There is also food for reflection in the fact that a single straight cut in the urethra—as, for instance, internal urethrotomy—is productive of less shock in many cases than is repeated stretching of the sensitive structures of the stricture by a sound or bougie. It is well known that an irritable, sensitive, and contractured tissue is much more safely and comfortably dealt with in any situation by a complete division than by attempts at stretching.

The cure of stricture by gradual dilatation is dependent upon (1) mere mechanical distension; (2) upon reactionary hyperæmia, with increased tissue-change at the site of the organic deposit. The functions of the lymphatics and veins are increased in activity, and absorption takes place very rapidly. It would appear, then, that if the tissue is extraordinarily sensitive, as is frequently the case in organic stricture, and if there are present toxic principles from decomposing urine, or ordinary septic materials at the site of the stricture or behind it, the operation of dilatation must necessarily be followed by a degree of nervous shock dependent upon the susceptibility of the individual and by a varying degree of absorption of noxious materials. The lymphatics and veins, unfortunately, have not the power of discriminating between the organic substances which are obnoxious to the welfare of the individual and those which can be disposed of in a physiological manner without injury to the blood or tissues, and they, therefore, take up the poisonous materials simultaneously with the products of retrograde tissue-change.

The relation of organic and functional disturbance of the kidneys to urethral fever is a most intimate one. There is probably no case of obstructive disease of the genito-urinary tract, of long standing, which is unaccompanied by functional disturbance of the kidneys, and, in a large proportion of cases, there occurs, later on, actual organic change in the renal tissues. This condition of affairs is to be anticipated and given serious consideration in every case of

chronic urinary disease. The immediate effects of the kidney-difficulty may not be marked, because of the activity of vicarious elimination by the skin and bowels, this vicarious action of these structures constituting the means by which the system accommodates itself to the imperfect elimination of the constituents of the urine. There are few, very few, persons, even among those who term themselves healthy, in whom the bodily sewage is absolutely perfect, and it is obvious that, when the kidneys perform their functions imperfectly, this condition of imperfect sewage becomes one of vital importance. When, as a consequence of operations upon the genito-urinary organs, surgical shock is produced, reflex hyperæmia of the renal tissue is quite apt to result. This produces a strain upon the kidney, which, in its impaired condition, it is unable to withstand, and as a consequence its functions are completely inhibited, with resultant uræmia.

The subject of autogenesis, in its relations to the development of certain constitutional diseases, demands more attention than is usually accorded it, and it is probable that researches in this direction, of a physio-chemical character, will, in the future, shed new light upon many diseases, the etiology of which is now obscure. Among the modern writers who have given considerable attention to the morbid results of perverted physiological chemistry, Benjamin Ward Richardson is perhaps the most prominent. It is to the researches of this author that we are indebted for the most widely accepted theory of the pathology of rheumatism. It is probable that perverted tissue-metabolism bears a causal relation to the typical cases of urethral fever. This perverted tissue-metabolism may quite readily be brought about by surgical shock. We know quite well that mental emotions of various kinds, and those impressions upon the nervous system which result in the condition that we term "shock," may produce marked changes in the physiological secretions of the body, these changes consisting either in an increased or diminished flow, or of obscure chemical changes of composition; thus we may have, through various nervous impressions, an increase or decrease in the quantity of the saliva, the lacteal secretion, the gastro-intestinal secretions, the urine, and of the menstrual flow.

A familiar illustration of the chemical effect of various emotions upon physiological secretions is the change in the quality of the lacteal secretion, induced by fright, anger, or grief. This change, although incapable of demonstration by microscopical or chemical research, is most pronounced in its morbid effects upon the child, cholera infantum of a most fatal character being a frequent sequel to the emotions of anger in the mother. Precisely what this change in chemical composition may be, is an open question; but it is possibly a species of decomposition which results in the formation of a poison analagous to the "tyro-toxicon" discovered by Prof. Vaughan in impure cow's-milk. It is well known that great care is necessary on the part of those who supply milk for the use of infants, to prevent fatigue and various sources of excitement in the cows. It is well known, too, that sexual excitement in a cow is productive of marked changes in the milk, and renders it unfit for human food. If these changes occur in one secretion, it is highly probable that all of the physiological secretions are susceptible to them. It is probably true, in the case of the saliva, that the emotion of anger causes the development of toxic principles in that secretion, and this may possibly explain the serious results that are so apt to ensue from the bite of an enraged human being. In the case of the urine, the influence of surgical shock may be inferred to consist in the development of organic poisons in that secretion. This, according to Reginald Harrison, may be considered to be hypothetically analagous to the ptomaines and leucomaines discovered by Selmi and Gautier, in both dead and living bodies, and which so closely resemble the vegetable alkaloids, particularly nicotine, brucine, and strychnine. The toxicæmia resulting from such changes would explain the otherwise obscure and mysterious cases of death following the simple introduction of a sound. In some cases the development of uræmia or toxicæmia is very gradual, and results from successive operations upon the urethra. The poisonous materials may accumulate in the system for some time and their presence fail to manifest itself until the system is, so to speak, ready for the explosion, when a previously tolerated and comparatively slight irritation of the genito-urinary apparatus will be sufficient to develop a serious result.

A competent surgeon, and one of my personal friends, had performed urethrotomy upon an apparently healthy young man of 28 years of age. The stricture was located about three-quarters of an inch posterior to the meatus, and was divided under cocaine without any difficulty or pain whatever.

A sound was passed every second day thereafter, each operation being preceded by the injection of a four per centum solution of the muriate of cocaine, the quantity used being about two fluiddrachms. About a week after the urethrotomy, the patient complained of considerable nervousness and insomnia; but this was not considered of any particular importance. On the ninth day, an attempt was made to perform the usual operation of sounding and injection of cocaine, the patient meanwhile lying upon an ordinary surgical chair. The doctor left the patient for a moment, to obtain his sound and to give the cocaine an opportunity to affect the urethra. He was called back in about a minute by the patient, who complained of dizziness, and immediately fell back on the chair in convulsions. Assistance was called, stimulants were given, and the galvanic current used, but without avail, the patient dying in something less than five minutes. At the post-mortem, a thorough examination of all the vital organs was made, but everything was found perfectly healthy, with the exception of the kidneys, which were so extremely congested that they presented a bluish appearance similar to that of the spleen. This fatal result was surely not attributable to the cocaine, but was evidently due to the sudden explosion of poisonous material which had been gradually accumulating in the system as a consequence of imperfect action of the kidneys, and the metabolic action of slight surgical shock upon the tissues. This condition of toxicæmia gradually grew more pronounced, and finally was so severe that a comparatively slight irritation was sufficient to inaugurate a nervous explosion. Such an irritation was afforded by the mechanical effect of the injection of cocaine, and it is probable that the introduction of simple water would have had a similar effect.

The danger of the development of urethral fever is directly proportionate to the depth of the distance of traumatic and surgical injuries of the urethra from the meatus. Those situated in the pendulous portion of the urethra are not, as a rule, very dangerous as compared with those situated in the fixed or deep portion of the canal. The explanation of this is very simple, the nerve supply of the deep urethra being much more abundant and sensitive, the cellular tissue more abundant, and the opportunities for drainage much less favorable than in the pendulous urethra. Decomposing urine is less apt to remain behind a stricture in the pendulous portion of the canal than in the deep portion, this being due to simple gravity and to the fact that strictures of this portion of the canal are usually of large calibre. Urinary extravasation in the pendulous portion of the urethra is not apt to produce serious danger to life, inasmuch as the connective tissue in this situation is very sparse and the extravasated fluid is likely to be detected before it is has burrowed back into the perineum.

The clinical features of urethral fever in its various forms require some special consideration. The nervous form of the disease usually appears in patients of an impressionable constitution, or who, in other words, present a decided tendency toward neurotic disturbances. Oftentimes its occurrence may be anticipated by the behavior of the patient while he is under instrumentation. He is quite apt to have nausea, perhaps vomiting, slight rigors, partial or complete orgasm, or more or less complete syncope during the introduction of instruments into the deep urethra. Such patients are apt to develop, as a rule, within twenty-four hours after urethral operations or injuries, a sharp chill. This lasts for a variable time, being rarely prolonged, and then disappears, leaving the patient about as well as before, with the exception perhaps of more or less nervous depression. Rarely, indeed, there may be a slight amount of fever or sweating.

The traumatic form is the most common; it manifests itself by a sharp chill, usually within twenty-four hours after operations or injuries of the genito-urinary tract, and is followed by pronounced fever and sweating. The disturbance either passes off after a single paroxysm, or is followed by a period of general malaise, with perhaps a recurrence of the paroxysms for several days. In these latter cases, there is present in all probability a slightly septic element.

The third form (the typical form of the disease) may or may not be attended by a violent chill coming on within twelve to thirty-six hours. There is marked prostration, violent vomiting and diarrhœa, coldness of the surface of the skin at first, succeeded by more or less febrile elevation of temperature later on if the patient survives, with suppression of urine, merging in a very short time in fatal cases into coma of an apparently uræmic type. I say "apparently uræmic type," because, according to the theory I have advanced regarding the action of shock upon the urine, there is probably in many cases a toxic element present independent of uræmia. Cases of this kind may come on gradually and mani-

fest themselves by a sudden explosion in the form of convulsions, as is illustrated by the fatal case that has just been related to you.

The fourth or septic form of urethral fever manifests itself usually by a slight (but sometimes by a very severe) chill; this is followed by fever of a varying degree of severity. The patient may sink into a typhoid condition, or become comatose, and die within from two to ten days from acute septicæmia, or the condition may be subacute and merge into the pyogenic form of septæmia, known more familiarly as pyæmia, in which event the patient finally succumbs to the slow development of circumscribed or diffuse purulent deposits in the joints, viscera, and other structures of the body.

The fifth form of urine fever may be described as a chronic condition of toxicæmia and nervous irritation produced by long-continued obstructive and inflammatory affections of the genito-urinary tract. This condition of toxicæmia and general nervous irritation is one which is not generally recognized, but which is very important in its relations to chronic genito-urinary disease. It exists in the majority of cases of organic stricture of long standing, in old men suffering with prostatic hypertrophy, in tumors of the bladder, in chronic cystitis from whatever cause it may arise, and in pyelitis, particularly the form due to the presence of nephritic calculi. There is a marked tendency in patients suffering with these affections to a mild form of hectic fever; flushings of the face, with slight elevation of temperature and perhaps followed by a certain degree of perspiration, are quite common; nervous irritability is especially marked. Indeed, there are few diseases which are productive of so much mental depression and of so much irritability of temper as chronic diseases of the genito-urinary tract. The old man with a vesical calculus or prostatic hypertrophy, or, for that matter, the young man with a stricture, is apt to be unreasonably morose and irritable. In all of these cases, there are apt to be present more or less obscure rheumatic or neuralgic pains in various situations. After prolonged retention of urine from any cause whatever, you will find that the majority of patients will suffer for a few days or weeks from more or less marked elevation of temperature. These different general conditions are due, in my opinion, to toxicæmia which is dependent upon (a) imperfect elimination of the products of retrograde tissue-metamorphosis, (b) to a greater or less degree of absorption of morbific materials produced by inflammation and the decomposition of residual urine behind the site of obstruction. You will find that many patients suffering from chronic genito-urinary disease of an obstructive or chronic character fail to realize how sick they are until the diseased condition has been removed, or at least greatly improved. They then find that slight disturbances to which they had paid comparatively little attention, and which they had never dreamed of attributing to their urinary trouble, have disappeared. This is due in a great measure to the fact that reflex nervous irritation has been relieved; but, more than this, it is due to the fact that the constant absorption of poisonous materials from the site of disease or above it no longer occurs.

I have designated a sixth or mixed form of the disease. It is probable that you will meet with comparatively few cases that cannot be assigned to one or the other of the first five forms of the disease that have been described, but occasionally cases will occur in which there are, for example, equally strong evidences of septic disturbance and of uræmia, with possibly a tendency to disturbance of the nervous functions.

The principal measures of treatment of urine fever are of a prophylactic character, for, unfortunately for the patient, the marked forms of the disease are seldom recovered from. The principal feature of prophylaxis should consist of strict attention to those principles laid down in the lecture on "Genito-urinary Hygiene." If the functions of the kidney are stimulated by alkaline diuretics, and the skin and bowels kept in an active condition, thus affording vicarious relief to the kidney, the patient is placed in the best possible condition to avoid those complications which we have described. In addition to these measures, moderate doses of antiseptic drugs may be given internally. Of these, I prefer boracic acid in ten-grain doses, as recommended by that excellent authority, Professor Palmer, of Louisville. Salicylic acid, or preferably the salicylate of soda, is also an admirable remedy. Local antisepsis in cases of chronic bladder and prostatic disease is of course essential, and can be accomplished by irrigation with mild antiseptic lotions, such as carbolic acid, borate of soda or boracic acid, and the bichloride of mercury. You should avoid operating upon cases complicated by structural renal disease if it is possible to do so, and, if an operation is unavoidable, you must be careful in your

manipulations; but you should throw the responsibility of your results entirely upon the patient and his friends. Prior to operative interference, particular attention should be paid to the urine and to local antisepsis. The patient should be put to bed and instructed to remain perfectly quiet; he should be placed upon a milk diet and moderate doses of quinine—5 grains, three times daily, for from a week to ten days previous to the time appointed for the operation, being about the required dose.

Various drugs have been recommended for administration just before or at the time of urinary manipulations or operations. Quinine and morphine in doses of ten grains and one-quarter grain respectively are the most popular remedies, and unquestionably have an excellent effect by increasing the resisting power of the nervous system and thus lessening the liability to shock. Jaborandi is also recommended for the same purpose, and, inasmuch as its physiological action is such that it must necessarily relieve any strain upon the kidney, this drug seems to me to be one of our most philosophical remedies. The muriate of pilocarpine may be given instead of the fluid extract of jaborandi, or the muriate of pilocarpine, in hypodermic doses of a fourth to one-half grain, instead of jaborandi; and, in case uræmia supervenes, this method of administration is absolutely essential.

The milder cases of urine fever (the nervous and traumatic forms) are rarely fatal, but may possibly lead to the severer forms of the disease, and consequently require our attention. The administration of opium and jaborandi, with perhaps (in the traumatic form of the disease) aconite or veratrum viride, constitutes the best measures at our command. In the uræmic form of the disease, our attention should first be directed to the vicarious elimination of urea, for we can waste no time in attempting to restore the functions of the kidney within the first few hours after the supervention of the uræmia, especially if coma has occurred. Pilocarpine will act upon the skin, even when the patient is in a comatose condition, and it should be given freely. The bowels should be moved by croton oil, two or three drops of which, in combination with five or six drops of olive oil, may be placed upon the back of the tongue. If the patient is able to swallow, elaterium in doses of from one-eighth to one-third of a grain is preferable to all other hydragogue cathartics. Hot baths should be given, and dry or wet cups applied over the region of the kidneys. Digitalis may be given internally as a diuretic after the emergency is over, but it would be a waste of time to attempt to accomplish anything by diuretics before vicarious elimination of urea has been attended to.

When the septicæmic or pyæmic form of urine fever develops, very little can be done in the majority of cases beyond supporting the powers of life by free stimulation, a fatal result being almost inevitable. It is, however, in my opinion, our duty to attempt to avert a fatal result by incision and drainage, where possible; and, if the case is clearly septic, a free incision at the site of the stricture, or a perineal cystotomy in cases of bladder and prostatic trouble, constitutes the proper surgical procedure.

The management of cases of chronic urinary fever consists in local antisepsis by irrigation and the removal as soon as possible of the organic condition upon which the gradual and constant septic infection depends.

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COMMUNICATIONS.

SMALL DOSES: THERAPEUTIC CONSIDERATIONS.

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(Continued from page 841.)

Electricity.—Proofs are not wanting that electricity, either in small or large doses, is a paralyzer, although the opponents of this theory insist that, given in medicinal doses, it is a nerve stimulant; but the latter view is based on a "temporary hypothesis," while the former is founded on facts. That there exists a diversity of opinion concerning this valuable agent in the treatment of various disease-conditions may be accounted for on the ground that the theory of the action is too intimately associated in the mind with the theory of the effect. The philosophy connected with the action of electricity is one thing, the physical or molecular changes incident thereto being taken as a cause, while the effect must be looked upon as a separate and distinct condition, representing an entity in itself.

Having arrived at this healthy understanding, we are prepared to estimate the various phenomena manifested by an agent

so universally applied. Taking our cue from Dr. Brunton, who says: "Slight electrical shocks from a coil increase the rapidity of the protoplasmic movements; stronger ones cause tetanic contraction" (*Phar., Ther., and Mat. Med.*, p. 46), which may be accepted as a demonstration of the proposition that electricity is a paralyzer. But, if more evidence were needed, we have it on the following page: "A constant current of electricity causes contraction and imperfect tetanus," referring of course to its action and effect on protoplasm. Now, what is the relation existing between the protoplasm and nerve and muscular tissue? It is well known that in the lower forms of life we are unable to differentiate between the nervous and the muscular tissue, so intimately are the two blended, their inter-relations being mutual; but, as we ascend in the scale, there is found a distinct and important difference, the inter-action and inter-relations of which will be referred to more particularly when I consider the subject of strychnine.

These experiments, along with the investigations of others, furnish sufficient evidence to warrant the following conclusions:

1st. That electricity is not only a protoplasmic poison, but also a paralyzer of nerve-function.

2d. That small doses, mild currents, increase the rapidity of protoplasmic and muscular movements, and

3d. That large doses, powerful currents, lessen the rapidity of protoplasmic and muscular movements, and, continued long enough, produce tetanic rigidity.

4th. That, by paralyzing nerve-function, control or restraining power over muscular irritability is lost in direct ratio to the strength of the electric current.

5th. The action of this agent is, therefore, always the same, only different in degree.

6th. The effect of the electric current depends upon the size of the dose—mild or strong currents—and the muscles supplied by enfeebled nerves, as a rule, will be first to respond to this influence.

The truth of these deductions is forcibly illustrated in the treatment of lumbago by the Faradic current, one of the most efficient remedies we have for this affection. These cases are observed in patients subject to the rheumatic or gouty diathesis, and generally appear shortly, or at times suddenly, after exposure to cold, damp, or inclement weather. A mild current properly applied for the period of from ten to thirty minutes will almost invariably relieve the pain, and frequently a single application will be sufficient. Much will depend on the nutrition of the patient, and whether the attack is acute or of long duration, and strong currents may be used to produce the same effect; but my observations lead me to conclude that the milder currents are to be preferred, as they cause less pain, and there is not the same depression following their application. The same method will be found effective in the treatment of contusions and in other affections of like character, and, while they afford relief and effect a cure, they really do nothing more than anticipate nature in the work. The *modus operandi* will be considered under the head of *remarks*, at the close of this paper, and, taken in connection with the study of strychnine, I trust we shall have a better knowledge of the action and the effects of small doses.

Strychnine.—The investigations of Brunton have shown that, in the experiments to determine the irritability of muscle, there is an interval between the application of the so-called stimulus and the contraction of the muscle, called the latent period. In connection with these observations is the statement, also, that the latent period is shortened by small doses of strychnine, while large doses lengthen it, which accords with the views already advocated in this paper, viz., that the action of a remedy is always the same in health, but the effect is modified by an increase or diminution of the dose. This statement can be misleading only when the circumstances and conditions attending the observation have been modified by influences already noted.

We have here, then, an illustration of an important general principle underlying the application of drugs to determine their physiological action, as well as a delicate indication for the selection of appropriate remedies in the treatment of disease—a principle which will be more fully understood when we consider the action and effects of ergot. But the work of Dr. Brunton does not end here, as he has placed himself on record concerning the manifestations of both nerves and muscles under the influence of various poisons, strychnine included. The action of the latter is admitted to be that of a nerve paralyzer, and when given in sufficient quantity ("action continued long enough") the resultant effect upon nerve and muscle is tetanic convulsions. A quotation will more fully demonstrate the views of our author: "In some cases the nerve is affected so much before the muscles (by poisons)

that at first sight it might appear that the nerve alone was paralyzed, and the muscle left unaffected.''[1]

Dr. Brunton is a painstaking and faithful observer, but, by a process of induction not warranted by the facts, his conclusions are sometimes barren of the therapeutic possibilities which ordinarily we are led to anticipate. Thus, he says: ''Strychnine stimulates the spinal cord, . . . and, if the action continue long enough, . . . will ultimately cause paralysis of both spinal cord and motor nerves.''

From what has been said, we may conclude that strychnine should preferably be given in small doses, the reasons for such a course being easily formulated:

1st. Because it shortens the latent period of muscular irritability, thereby increasing the circulation and improving the nutrition of the tissues.

2d. Because the remedy is more evenly distributed throughout the system, and the muscles supplied by enfeebled nerves, being bathed in the blood containing it in solution, are constantly under its influence.

3d. Because it reduces to a minimum the dangers of tetanic rigidity and convulsions.

As an objection, it may be urged that small doses would scarcely be appreciated, and that they would fail for lack of power to saturate the circulating fluid; but such opposition is refuted by the experiments of Magendie, a detailed account of which will be omitted. It will be sufficient to recall the following facts: when injected into the pleura, the poisonous effects of strychnine were perceived almost immediately, and within twenty seconds when introduced into the peritoneum. Absorption from the mucous surfaces was less rapid, but the effect was the same. The well-known diffusibility of strychnine, 1 part in 1,280,000 parts of water being perceptible to the taste, gives this drug unusually distinctive characters as a subject for study.

As the present paper is mainly intended to call attention to certain general laws, no attempt will be made here to outline a complete working theory, and I may close with some suggestions, therapeutic in character, which are in accord with the views set forth.

Small doses of strychnine have lately been recommended for the relief of insomnia due to exhaustion, a condition often found in those who are engaged in literary work. It is assumed that a person who gets too tired will be unable to sleep, and that, if several small doses of strychnine are taken shortly before bed-hour, this feeling of exhaustion will be relieved and the patient left just tired enough, when Morpheus, the changing god of dreams, will gently lull him to slumber. This method I have found far superior to the use of the bromides or chloral, while its simplicity and practical value commend it to every practitioner. The plan I have adopted is as follows: About half an hour before retiring, let the patient dissolve a tablet containing the one one-hundredth of a grain of the sulphate in six teaspoonfuls of water, directing that a teaspoonful be taken every five minutes until the whole is taken. The results of this treatment will be a great surprise to those who have not considered the matter, and are well calculated to demonstrate the principle for which I would contend. In the treatment of many slight gastric affections, a similar plan will be found equally satisfactory. By ''slight gastric affections'' are meant those cases in which apparently there is little demand for medication, but still are of such a character that the subjects are necessarily compelled to undergo no little uneasiness, such as slight dyspepsia, and frequently those cases resulting from sympathetic derangements, as in the case of the vomiting of pregnancy. The latter is often very effectively treated by adding, to a glass of water, from ten to twenty drops of nux vomica (tincture), directing that, in the early morning, a teaspoonful be taken every ten minutes for an hour, and, after the first hour, the same dose may be continued at intervals of one or two hours. In the treatment of ordinary simple dyspeptic conditions, such as that just mentioned, a solution of the same strength may be prepared, and the patient directed to take a teaspoonful before and after meals. The same plan is very useful in the case of those suffering from a debilitated condition of the system, and may be advantageously adopted as an adjuvant to other treatment.

Remarks.—A few words should be added here as to the value of these generalizations, and the bearing which they may have in the elucidation of the theory of the actual value of small doses in the treatment of disease. As to strychnine, for example, its value is well recognized, but the method by which we arrive at results are not so well understood, the deductions of experimental physiologists being somewhat contradictory and misleading. Its application in the cases above mentioned is accounted for on the

[1] *Loc. cit.*, p. 119.

basis of its physio-pathological action, or, to be more plain, its physiological action in the presence of pathological changes, involving, we may presume, certain modifications in the cell-action. Whether the tissues are normal or abnormal, we always have to do with the cell-action, and, when a medicament is added, we have as a resultant the cell-action and the drug-action, and we may assume that, when the latter is properly applied, the drug-action is in the nature of a complementary action to that of the cell. It is certainly not "substitutive" action, nor does the expression "elective action" sufficiently cover the ground, while, in the light of these investigations, both homœopathy and dosimetry are altogether irrelevant expressions. Neither can it be called specific, for but very few remedies are confined to any specific effects, at least not in the treatment of disease. As I do not feel at liberty to decide upon the matter at present, we may conveniently submit the matter to a medical linguist like Dr. Campbell, or a nosographer such as Dr. Gouley.

In closing the discussion, it does not follow that the subject has been exhausted, for only three remedies have been considered, and in a most superficial and hasty manner; but, if what has been said will serve to cast a single additional ray of light upon an intricate and interesting matter of the utmost importance to physicians and to humanity, I shall feel that the task has not been undertaken in vain. I venture the assertion that there is not a remedy in the whole materia medica which is not entitled to a restudy upon the plan which I have somewhat faintly outlined, and doubtless the physician of the future will be able to understand the difference between drug-action and drug-effect; he will be competent to point out where the action ends and when the effect begins. The therapeutist of the future will be he who reads aright the value and the application of small doses, and who, with but few remedies, has learned to know them well. An apt quotation from Dr. Campbell will suffice: "For many an hypothesis supported by the ablest of physicians has disappeared from the pages of our medical books, leaving only a few words, like fossils, to tell future generations the story of their rise and fall."

4719 Frankford Avenue.

—Beginning with the session of 1888-'89, the College of Physicians and Surgeons, New York, will require a three years' course of study from its students.

FOOD AND DYSPEPSIA.[1]

BY GEORGE N. HIGHLEY, M.D.,
CONSHOHOCKEN, PA.

The subject to which I invite your attention for a few minutes is one which I fear the most of you will think somewhat dull, though I doubt if any will deny its importance. Indeed, when one considers the large percentage of people who are sufferers from this malady, either as a complication of other affections or as a disease *per se*, the wonder is that so little attention is given to it.

Dyspepsia is impaired digestion: digestion is a process of solution by hydration. Food necessarily exists in the vegetable world in an insoluble form, otherwise the rains would soon return it to the soil. To convert the insoluble food into a soluble form is the prime object of the digestive process. How is this accomplished? Liebig's division of foods into proteids, carbo-hydrates, and fats seems to be the most natural one, and is the classification most generally accepted at this time.

The food in passing along the alimentary canal comes in contact with the following juices, viz: The saliva, gastric juice, bile, pancreatic juice, and others whose properties are either unimportant or little understood. So far, experimenters have proved almost beyond cavil that the saliva converts the insoluble starch into the soluble grape-sugar; that the gastric juice changes the insoluble proteids into the soluble peptones; that the bile and pancreatic juice render the fatty foods more soluble; and that the pancreatic juice alone is capable of effecting all these changes. However, in order that these changes may be fully and easily accomplished, it is necessary that the food shall have undergone some preliminary treatment, which mainly consists in tissue-disintegration. This is accomplished by cooking and by mastication.

Had civilized man the peptic powers of some of his four-handed cousins—as for instance the Ceboo monkey, which is said to be able to eat its own weight of bananas in the twenty-four hours—he might ingest his food in any manner and quantity he saw fit, without impairing the digestive process. But, while a few seem to be able to digest or void whatever they can ingest, the majority must eat food properly cooked and masticated, or suffer the tortures of

[1] Read before the Montgomery Co., Pa., Medical Society.

indigestion. The part which mastication plays in comminuting the food and mixing it with the saliva is so obvious that mere mention of it is sufficient.

I ask your attention a little more fully to the changes wrought by cooking. First, as to its effect upon farinaceous foods. The starch corpuscle, which is the component part of this class of foods, is made up of an outside envelope, cellulose, and an inner part, granulose. Now, while the salivary secretion is quite active on the granulose, readily converting it into grape-sugar, it is unable to act on the cellulose. Hence the digestion of raw unboiled starch is attended with considerable difficulty. In the process of boiling or cooking, the cellulose coat is ruptured, exposing the granulose, and in this state the saliva has ready access to it. The cooking of animal foods, so as to promote their solubility to the greatest possible degree, requires considerable skill. Bad cooking augments their insolubility rather than their solubility. This will be best understood by observing the effect of ordinary methods of cooking upon the several constituents of meat. A piece of lean meat, as you all know, is composed of albumen, gelatin, and fibrin, closely related in their chemical composition and properties; kreatine and kreatinine, to which the stimulating properties of the meat are due; besides a small quantity of mineral salts, very necessary to tissue-nutrition.

As the white of the egg is a typical example of nearly pure albumen, we may see how it is affected by cooking. If we heat some white of egg in a test-tube into which a thermometer has been previously placed, we will find that, at a temperature of 134° F., white fibers begin to appear within it. These gradually increase until the whole mass becomes solid, which it does at a temperature of 160° F. The albumen thus solidified is tender, delicate, of a jelly-like consistence, and easily digestible. If now we increase the heat up to 212°—the boiling-point of water—keeping it there a short time, the coagulum will become shrunken, hard, and horny. Upon further elevation of temperature, it is converted into a substance so hard and tough that it may be used as a cement.

This simple experiment will show at once the difference between an egg which has been cooked by immersion in boiling water and one cooked at a temperature not exceeding 180° F. Even in the orthodox method of putting the egg into boiling water for three and a half minutes, it will be found that a part of it is quite hard, while other parts are semi-raw and slimy. If the same egg had been put into water at a temperature of about 188°, and allowed to remain ten minutes or more—time not so important, as it will not become hard even in ten hours—it would be found evenly cooked throughout. Practically, this can be done by putting the egg into at least a pint of boiling water, immediately setting it off the fire, and allowing the egg to remain in the water ten minutes.

Gelatin is said to form one-half the whole body, or, more correctly, perhaps, one-half the whole body is convertible by boiling water into gelatin. The tissues thus convertible into gelatin are tendons, sheaths of muscles, etc., and the cell-walls. Gelatin is a semi-solid tasteless substance, readily soluble in water at a slight elevation of temperature. Prolonged boiling and drying convert it into glue. The properties of fibrin, so far as cooking is concerned, are similar to those of albumen and gelatin. It is coagulable like albumen, and soluble like gelatin, though to a less extent. From what has just been said, it is evident that, whatever may be the method of cooking, temperature is an important consideration. A temperature sufficient to convert the albumen, gelatin, and fibrin into their most soluble condition is the desirable point. If this be exceeded, their solubility is lessened rather than augmented.

Retention of natural juices is another important point, not only to promote solubility, but also to preserve its nutritive and sapid qualities. If boiling be the method of cooking, the meat should be immersed at once into boiling water and kept there for a few minutes, or long enough to give it an insoluble coating of coagulated albumen. This will retain the juices, after which the cooking may be continued at a lower temperature. In roasting and grilling, we have not only to guard against excessive temperature, but also evaporation. If this be not prevented, we will have desiccated rather than cooked meat. This is a most common error of cookery; lately, however, patent roasters have been put upon the market and widely sold (at least in this vicinity), which fulfill the indication.

In stewing, the object is to have as much of the meat dissolved in the cooking medium—the water—as possible; hence it should be immersed in cold water and the temperature *slowly* raised, so that the early coagulation of albumen may not arrest the escape of the juices.

Frying is an operation practically impossible to the average cook, if the principles here laid down are carried out. Time forbids my going into the details of the several methods of cooking, and I must, therefore, content myself with these few general hints.

Our means of aiding the digestive process within the body are exceedingly limited. Beyond affording temporary relief with drugs, which irritate the coats of the stomach, causing a little extra flow of gastric juice (and these fail with repetition), or with pepsin, pancreatin, and the like, which digest small quantities of food, we are powerless to act. Far greater is the aid which we can render digestion by a careful selection of food, and having it properly cooked and masticated. Of not a little importance, likewise, is quantity. No more food should be ingested than can be readily assimilated. The Bushman who, in the twenty-four hours, can eat two dozen pounds of hippopotamus liver, a bucketful of broiled marrow, besides whole handfuls of peanuts and hackberries, is not so much more disgusting than he who goes to the evening reception and overloads his stomach with fried oysters, croquettes, lobster-salad, five or six varieties of ice-cream, besides cakes, coffee, ice-water, and numerous other articles. Intemperance in eating is to be as carefully avoided as intemperance in drinking.

In health, the appetite is a faithful exponent of the demands of tissue-nutrition. The dyspeptic has, however, more often a morbid craving for repletion, which must be carefully guarded against.

The important points, then, to be considered in connection with dyspepsia, are the quality of food, the quantity, cooking, and mastication. If these are properly attended to, we would have little need of medication.

THE MANAGEMENT OF CASES OF ABORTION.

BY STANLEY M. WARD, M.D.,
ELLENVILLE, N. Y.

The term abortion is used throughout this article to indicate the expulsion by the pregnant uterus of its contents prior to the seventh month of utero-gestation. Between the seventh and ninth months, inasmuch as the process of expulsion approximates so closely to labor at term, I think premature labor is a better term to apply.

As a rule, the nearer the fœtus has reached the seventh month of its intra-uterine life, the more pain the mother will undergo during her labor, but the less will she be exposed to the dangers of hemorrhage. The opposite of this rule is also true.

Of course, it is the duty of every physician to endeavor to thwart the efforts of the pregnant uterus when it attempts to expel its contents prematurely; but, in a majority of cases, after the woman begins to experience the pain of uterine expansion, let there be never so little flow, his efforts will be in vain. In a certain number of cases, we find something like the following to deal with: Some pain and hemorrhage, elongated cervix, rigid os, slight rise in body-heat, nausea, and vomiting. If we are morally certain that abortion is about to take place, our efforts should be directed toward hastening that event, and we should endeavor to empty the uterus as quickly as is compatible with the safety of the patient. A hypodermic injection of morphia, with a hot vaginal douche of some antiseptic solution, is administered, and the woman put to bed. After waiting from half to three-quarters of an hour, we make another vaginal examination, and our future treatment is largely guided by the result of that and the length of time the woman has been pregnant. If only for six or eight weeks, we shall not expect much of a product of conception, and the os uteri will not dilate much. The danger will be from hemorrhage, and later on from septic troubles should the uterus not be thoroughly cleared. The one thing *not to use*, no matter how severe the bleeding or how faint the pains, is ergot. A good many practitioners do use it, as I am aware, and a good many have trouble, as I have cause to know. A tampon made by winding a piece of asepticized cotton firmly and strongly with stout thread can be packed into the vagina, pressed firmly against the os, and we are masters of the situation. If the symptoms are urgent, it behooves us to stay with the patient; if not, we can leave, calling again in six to ten hours, when we shall probably find the contents of the uterus coming in good shape on the removal of the tampon. If not, the treatment may be continued by inserting another; and, if the patient is nervous and excitable, a fifteen-grain dose of chloral hydrate may be given if the stomach will allow it; if not, double the quantity by the rectum or an hypodermic injection of morphia if the physician prefers. After having satisfied myself that the uterus has been completely emptied, I am in the habit of ordering a douche twice daily of some antiseptic solution, and usually place my patient on

quinia and ergot—two grains of the former made into pill-mass with a half-grain of the so-called ergotine—thrice daily for a week. Cannabis Indica makes a valuable addition to this pill if there is a nervous disposition or if the patient is inclined toward melancholia, as sometimes happens. Thus I would manage an abortion happening early in fœtal life. Later on, as I have said, the treatment approximates toward that of labor at term. In any case where dilatation is slow, whether hemorrhage is severe or not, I use the tampon with the greatest faith and confidence. Equally am I certain that the use of ergot is productive of harm. I have seen the os uteri close up under its action time and again. The physician is often called to see patients whose history is something like this: A woman, after having had cessation of menses for three or four months, morning sickness, enlarged breasts, etc., begins to be "unwell." She wears a napkin, thinking herself about to menstruate. For a few days, the flow is slight, accompanied with some pain; suddenly, while at stool or while lifting, a great gush of blood comes from the vagina; with difficulty she reaches her bed, the practitioner finds her exsanguinated, pulseless or nearly so, flowing profusely. She may be unconscious. He gathers a little history, but there is no time to go much into the minutiæ. The first step is an examination. The os is somewhat dilated, the vagina filled with clots. He removes these and applies a tampon and administers restoratives. He should not give ergot unless he can be sure, which from the nature of the case he cannot be, that the uterus is empty; if he does, the flowing may stop, to be sure; but the uterus will contract, and he is only exposing the woman to danger in the future. I have seen such a case, in which ergot was used freely, the patient rallied from the profound syncope, and the hemorrhage stopped; but she bled for a month in varying quantities, at times profusely, and it was only after a bit of the placental membrane had been removed that it ceased. In the case I have ventured to portray, as soon as reaction has taken place, the physician must look for the offending substance. In the majority of cases, it can be easily found and removed, frequently with the fingers or dressing-forceps. If the tampon is applied thoroughly, it controls the hemorrhage and helps dilate the os uteri. This is an entirely different state of affairs from a case of *post-partum* hemorrhage at full term labor. In the one case, we have a greatly enlarged uterus which we know to be thoroughly emptied—our efforts are all directed toward closing it; in the other, a uterus not enlarged to any great extent, its condition we do not know, though we presume it to be only partially empty—our effort is not to close it and so shut up within it the very thing that is causing the damage. Of course, the physician is expected in such a case to remain with his patient, and not to leave her until all danger is past; and all danger *is not past* until the bit of placenta or whatever it may be is removed and the uterus thoroughly contracted If necessary, a dull curette must be used and the interior of the uterus scraped; but such measures are rarely necessary if the physician treats the case properly. I have assumed in the above that the physician, in making his first examination, fails to find within easy reach any substance that might be the cause of the hemorrhage; if he is so fortunate as to find anything, he of course should remove it, the quicker the better; and, as before stated, if he is now *certain* that the uterus is cleared, he may use ergot either by the mouth or hypodermically, preferably the latter.

A word or two about the method of using this drug: I have given the normal liquid ergot, Squibb's and Wyeth's fluid extracts, time and again by means of the hypodermic syringe, and never saw an abscess result. I usually give a half-teaspoonful at a dose. I administered during one night six such doses, to a woman who was flowing profusely and unable to swallow, and did not have a single bad result.

There is still another class of cases in women who have aborted; this is made up of those who have had bad treatment, viz., ergot administered at an improper time, and thus part of the products of conception have been shut up within the uterine cavity; and also of those women who, commencing to flow after an amenorrhœa of several months, are uncertain as to whether or not they have aborted. This is a difficult class of cases to treat. There is, on the one hand, the natural disinclination which the patient feels to having her uterus dilated, and, on the other, the uncertainty which, in the light of the imperfect history that most such cases give, the physician has as to just what proceeding will relieve the woman most safely and quickly. One patient consulted me for malaria, giving an excellent history of intermittent fever; but she incidentally remarked that she was not "regular." A little further questioning disclosed the fact that she had aborted. The malarial symptoms were septic from retained mem-

branes, and a dangerous hemorrhage, occurring within thirty-six hours from the time I first saw her, made the case clear. I removed some fragments from the uterus, and washed out the cavity with warm sublimate water. The malaria vanished, and she made a good recovery. In this case, I was saved the labor of dilating the uterus, as nature did it for me, as she will in a certain number of cases; but, where this does not happen, and such symptoms come on, symptoms which can be interpreted in only one way, dilatation by tupelo or sea-tangle tents, with a tampon thoroughly aseptic, must be resorted to. When dilatation is as complete as is necessary, a weak solution of iodine, sublimate, or carbolic acid may be thrown into the uterus, with the hope that the offending matters may be washed out; if this hope is not realized, a dull curette should be employed. There are some of the leaders in the obstetric world who advocate a greater reliance on the natural powers, in the meantime using rest, opium, quinine, and ergot with vaginal injections, to accomplish the desired result. I trust that I am as conservative in the treatment of these cases as the safety of the woman will allow; but, after all is said, some cases will fall into our hands in which radical measures must be employed. We should always give nature a fair field and all the chance in the world; but it may well happen that, while waiting to see what she can do, we lose our golden opportunity, and, when too late, attempt to do what, a few days before, could have been done just as well and with far different results. I believe, too, that if, within a few days of the time we may suppose the woman aborted—speaking now of those cases in which it is difficult to say from the symptoms and history whether or not such is the case—we dilate the os uteri and wash out the cavity, we shall be spared the use of harsher means. One thing, especially in this class of cases, it is absolutely necessary to get—the confidence of the patient; with this and the ability to interpret correctly what we see and hear, with a cool head and some tents, dull curette, tampons, a placenta-forceps, a good syringe, and an antiseptic, we shall seldom if ever fail to relieve our patient.

—It is announced, from Maysville, Ky., that a child recently born there has no arms, but a protuberance extending a few inches from each shoulder and terminating in the fingers. Its legs are said to be very short and stubby, and to turn backward.

MANAGEMENT OF THE NEW-BORN CHILD.

BY A. ADY, M.D.,
MUSCATINE, IOWA.

Late articles in the REPORTER remind me that I have some peculiar notions about the management of new-born children, and I would like to communicate them to your other readers. In the first place, I never allow anything made of wool to be worn next to the skin; let it be ever so soft and fine, it will tickle and irritate the cuticle of some little ones and make them cross and fretful; then come catnip and other remedies for colic, and in a short time something does ail the baby. Having often seen fretful babies made good and quiet by the removal of such clothing, it is the first thing seen to when consulted in such cases.

My favorite apparel for a first dressing is a cotton-flannel slip, and diaper of the same material (soft side next to the skin); nothing more—no bands, no skirts, nothing to punish the little fellow. After this simple toilet, it can be wrapped as warmly as desired; and it will generally be a good baby, and certainly a pretty one in its mother's eye.

Now, about the cord. What is the use of two or three inches of that, full of blood, but to furnish material for sepsis? My way of treating that is, first, put on the two ligatures and separate the funis between them; then, after the child is cleansed (using melted lard or vaseline instead of water and soap), the end of the cord is snipped off along with the ligature and the gelatine thoroughly squeezed out, after which it will rarely bleed to any amount; but, for fear it should, it is tied again as close to the abdomen as can be done without including the integuments. It is then left entirely alone—no band, no application of any kind—and in twenty-four hours the remains of the cord will be nothing but a scab, and in four or five days will drop, leaving a cicatrix in its place. The belly-band, make it of what material you will, is nothing but a relic of barbarism, and of no more use than a band around the head to prevent the fontanel from enlarging—uncomfortable and mischievous in its effects, many times causing and never preventing hernia of any kind. It is a well-known anatomical fact that the inguinal region is the weakest in the abdomen. The band does not protect that in the least; on the contrary, forces the intestines down to it. Even if the umbilical opening has not properly closed, the pressure of a band around

the circumference of the body will only keep a knuckle of intestine in the opening and very effectually prevent its closing, which it will generally do if left alone. Who would think of trying to cure an umbilical hernia with a broad band alone?

During my first fifteen years in practice, I used the ordinary band and compresses for the navel. In that time I had two fatal cases of umbilical hemorrhage after separation of the cord, and several of hernia requiring treatment. For the last twenty years, having a much larger obstetrical practice, and treating every case as indicated above, I have had no hemorrhage, no inflamed or ulcerated navel, and but one case of umbilical hernia.

Society Reports.

GERMAN MEDICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, May 14, 1888.

Vice-President Lawrence Wolff in the chair. Charles L. Weed, Secretary.

Dr. Carl Seiler read a paper on

Hypertrophy of the Tonsils.

He opened his remarks by stating that as yet we did not know whether the tonsils performed any physiological function or not, but that the view was prevalent that these organs were residuary and of no use in the economy. He stated further that in the normal condition they were invisible, and became visible only by an hypertrophy of their tissue. This view had lately been forcibly expressed by Dr. Daly, of Pittsburgh, and found a proof in the fact that, even when slightly hypertrophied in youth, they usually disappeared at the age of 25 or 30 years. They had no connection whatsoever with the genito-urinary apparatus, as had recently been asserted.

After briefly describing the minute anatomy of the tonsil, the lecturer entered upon the subject proper, and said that we could recognize three distinct varieties of hypertrophied tonsils: first, the ordinary soft hypertrophied tonsil, most commonly met with in childhood and early youth, and rarely found in adult age. This variety is characterized by simple enlargement of the the tonsillar tissue, with a corresponding increase in the size of the crypts, which latter mostly contain plugs of white cheesy secretion. This secretion, in some cases, becomes putrid and emits an extremely disagreeable odor. This simple hypertrophied tonsil is frequently the seat of periodical acute inflammation, which may or may not produce parenchymatous suppuration. Coexisting with this chronic tonsillar hypertrophy, we usually find a chronic naso-pharyngeal catarrh and more or less hypertrophy of the pharyngeal tonsil. These conditions give rise to a variety of symptoms, the most prominent of which are interference with proper vocalization and articulation, insufficient aeration of the blood, gastric disturbances, and frequently catarrh of the middle ear.

The second variety is the so-called scirrhous tonsil, first mentioned by Dr. Jarvis, of New York, which is characterized by a smooth exterior surface and a hard cartilaginous feel to the touch of the finger or probe. The crypts are usually not enlarged, and, if so, rarely contain the cheesy secretion. This variety of hypertrophied tonsil is met with usually in young adults, and is rarely, if ever, the seat of acute periodical inflammation. The hardness is imparted to it by a deposit of connective tissue between the cellular elements, and particularly around the blood-vessels, canaliculizing them and thus depriving them of their contractility. They interfere, by their presence, with vocalization and articulation; and naso-pharyngeal catarrh, as well as chronic laryngeal inflammation, frequently coexists with them.

The third variety may be called the ragged hypertrophied tonsil, and is nothing but the result of the first variety having been the seat of frequent tonsillar abscesses, which have caused parts of the tissue to slough away, leaving a ragged mass of tonsillar tissue between the faucial pillars. It is usually found in young strumous adults, and is perhaps the most dangerous to the general health, inasmuch as it gives lodgment to septic material, and thus, in many cases, produces chronic septicæmia.

Dr. Seiler then entered into the consideration of the treatment of hypertrophied tonsils, and said that in all cases the offending masses should be removed, but that the method by which this was to be accomplished should be carefully considered and adapted to the requirements of each individual case. All chemical caustics applied to the surface of the tonsil were worse than useless, as their application gave rise to a great deal of pain and had to be kept up for a considerable length of time to produce

any results at all. In the ordinary soft variety, the tonsil was best removed by ablation with the tonsillotome. Care should, however, be taken not to wound the edge of the anterior pillar, because a small branch of the tonsilar artery runs close to this edge, and, when cut, gives rise to hemorrhage difficult to control. If the anterior pillar is adherent to the tonsil, it should be loosened, and if this is not possible, owing to the bands of fibrous tissue connecting the pillar with the tonsil being too strong to be torn, the tonsillotome cannot be used with any degree of safety, and the galvano-cautery knife should be used. After the projecting portion of the tonsil had been ablated, the cut surface should be brushed over with a 60-grain solution of nitrate of silver, to cause contraction of the capillaries and to cover the wound; and any secondary hemorrhage, which, however, rarely occurred, should be controlled with a strong solution of tannic and gallic acid, used as a gargle. The old method of removing the tonsils with the volsellum and bistoury, the lecturer said, was unsafe, as the edge of the anterior pillar, even when not adherent, was too easily wounded by the heel of the knife. Total extirpation or enucleation was also dangerous, besides being unnecessary, except in the extremely rare cases of cancerous growth in the tonsil.

The safest and only applicable one in cases of ragged tonsil was the galvano-caustic method of removing hypertrophied tonsils. In applying this method, the galvano-cautery knife should be heated to a bright red heat and should then be pressed into the tissue of the tonsil by entering one of the crypts and cutting with it from within outward, so that the eschar resulting from the burn can easily fall off and does not become impacted in the tissue of the tonsil. This procedure, Dr. Seiler said, did not give rise to any pain, and should be repeated at intervals of a week or ten days, and from four to six applications usually sufficed to reduce the tonsils to a size compatible with health and comfort of the patient. Under no circumstances should any operation for the removal or reduction of hypertrophied tonsils be undertaken while the organ was in a state of acute inflammation. In the case of the ragged tonsil, scraping the tonsilar tissue from the capsule with a sharp curette had been recommended; but this method was not only very bloody, but also painful, and on that account the galvano-cautery was to be preferred.

For the removal of the scirrhous tonsil, Dr. Seiler recommended the Jarvis snare as the best and safest instrument. The steel wire loop should be laid around the enlarged tonsil, and, by turning the screw, should be gradually decreased in size until the portion encircled by the wire was cut off. If done slowly, the operation occasioned very little pain, and time was given for the edges of the rigid vessels to become agglutinated, so that little or no hemorrhage resulted. The best way, he said, was to start the snaring process and then let the patient turn the screw himself, trusting to him that it was not done too quickly; for the patient would tighten the loop until he felt the pain, and would then stop, to begin again when the pain had ceased. The time occupied in thus removing a scirrhous tonsil was from two to three hours.

Dr. Muehleck, in opening the discussion on Dr. Seiler's paper, suggested that many of the supposed cases of hæmophilia were cases of scirrhous tonsil, in which the canaliculization of the vessels caused profuse and persistent hemorrhage after ablation. For this reason he asked the lecturer to definitely state the diagnostic differentiation between the soft and fibrous forms.

Dr. Vansant desired the judgment of Dr. Seiler upon the use of alkalies in acute tonsilitis, especially of sodium bicarbonate and borax. He inquired, furthermore, whether, after repeated attacks of inflammation, the resulting hypertrophy ever spontaneously disappears. In the matter of diagnosis, it should be borne in mind that other tissue-changes than simple inflammation and hypertrophy may have their seat in the tonsils. It is a question whether or not the initial lesion of syphilis would be likely to lead to such error. The cases he had observed presented a mere superficial ulceration without induration. In none of the cases reported by Tchisbriakoff, Peterson, Tomashevsky, and Severi within the past year was the fact of induration mentioned. He would like to know whether this peculiarity is constant in a lesion in this location.

Dr. Wolff had had considerable success in aborting acute tonsillitis by Dr. Seiler's method—viz., by penciling with a 25 per cent. solution of silver nitrate. The attacks were, however, aborted only when the application was made within the first twenty-four hours; nevertheless, even a later application was generally successful in preventing suppuration, besides giving great comfort to the patient by reducing the tension and pain.

Dr. Friebis noted the frequent association of tonsillar hypertrophy and otitis media, but was not clear in his mind whether the

same is to be attributed to impeded nasal respiration (mouth-breathing), or to the septic influences from the crypts, or to mechanical obstruction of the mouth of the Eustachian tube by the swollen gland.

Dr. Miller, in using the cautery knife, had frequently had it stick in the tonsilar tissue, and had caused pain and hemorrhage by its violent removal. This difficulty was due to a too early shutting-off of the current, and could easily be avoided. The knife should be hot when applied and removed. He had used the galvano-cautery more often than the guillotine—even in the soft variety—owing to an unconquerable prejudice on the part of the patients against any cutting operation. For the same reason the blade must be heated after it is in the mouth, so that the patient may not see it. If both tonsils were treated at one sitting, deglutition would be rendered unnecessarily painful. He treats them, therefore, in alternation, with two sittings per week. He reduces them so that they do not project beyond the pillars, and leaves the rest to cicatricial contraction. A most useful battery for the purpose is that of Dr. Seiler. The method of gouging out the growth with the finger is not only barbarous but dangerous. He would not agree with the lecturer that the tonsils are necessarily in a pathological state when they fill the space between the anterior and posterior pillars and do not extend beyond them.

Dr. Weed quoted the two cases reported by Croly, of primary sarcoma of the tonsil, in both of which incisions were made to evacuate the supposed abscess. Such an affection might be mistaken for an hypertrophy even more easily than for quinsy, and the guillotine might evoke a dangerous hemorrhage. In cases of acute tonsilitis, the diagnosis is rendered difficult by the fact that a variety of affections have here their local manifestations. Le Gendre considers the tonsil the site of the initial lesions of scarlatina and diphtheria, and Fränkel calls attention to other varieties of septic infection from this gland. Le Brun looks upon all tonsillitis as infectious, and regulates his therapeusis accordingly; on the other hand, Frölich reports a group of cases, in some of which the tonsil seems to have been the seat of local lesion, although not the point of original inoculation. The first case was one of so-called follicular tonsillitis followed by a fatal suppurative peritonitis. At the autopsy, Frölich and his assistant sustained slight wounds with a resulting follicular tonsillitis. A number of the household developed similar symptoms. In addition to the cases of syphilitic inoculation quoted by Dr. Vansant are a number collected by Dr. Delavan in the Annual of the Universal Medical Sciences, just published. There being, therefore, so many varieties of acute tonsillar inflammation, it is idle to vaunt any one remedy as being suited to all cases. The strong solution of nitrate of silver had in the speaker's hands seemed to abort the attacks of recurrent quinsy, or had at least modified the process, but had failed in other forms of inflammation. He was unable to state whether the virtue of the silver salt was in its astringency or in its germicide power. In tonsillotomy for hypertrophy it is, according to the experiments of Zuckerkandl, impossible to wound the internal carotid without cutting the wall of the pharynx.

Dr. Seiler, in closing the discussion, said that the differentiation between the soft and scirrhous varieties of hypertrophy was easily made by the sense of touch, the former being soft and doughy while the latter was hard and cartilaginous and never occurs before the age of puberty. He believed that an initial lesion of syphilis upon the tonsil was never indurated. This was owing to a poverty of submucous connective tissue. An early diagnostic sign is glandular involvement at the angle of the jaws. The much-vaunted alkaline treatment of acute tonsillitis with bicarbonate of soda or borax had, in his experience, given no results greater than a temporary alleviation of the pain. The only abortive treatment with which he had had success was that mentioned by Dr. Wolff. There is no doubt that hypertrophy of the tonsil does sometimes disappear with the advancing age of the patient. This is due to a physiological atrophy of the glands. The periodical attacks of acute inflammation may be prevented by a proper tonic treatment, attention to hygiene, and particularly, by ablutions of the neck and chest, morning and night.

—The *New York Times* says that an infant, eleven months old, was taken ill suddenly one day last week, in Hart Park, S. I. A doctor could not determine what ailed it. Finally, Mrs. Grinnell discovered a long piece of black thread hanging down from its stomach. She endeavored to pull it out, but could not do so. A doctor was summoned, and, after cutting the skin, found a needle about two inches long attached. He pulled it out, and the child is reported to be getting well. It is thought that the needle was lying on the floor with the point raised, and that the baby crept on it.

Special Correspondence.

MEDICAL JOTTINGS FROM THE OCCIDENT.

San Francisco, Cal., May 28, 1888.

No. 2.

Since my last letter, I have visited *one* of the State Lunatic Asylums—Stockton. The second is situated at Napa, and a third is in construction at Santa Clara. Three asylums, one State of a million population. Do not adjudge us all insane! It is supposed by our genial "glorious climate" advocators that, like phthisis pulmonalis, the majority of these cases are imported from the East. The pet expression of an enthusiastic Californian, "God's own country," does not always bear a close examination. Lung-troubles of all kinds in San Francisco head the list of death-rate. The loyal "Frisconian" tells you of importation, dreadful climate of the East, &c.; but an unbiased observer can readily see, in the *t. d.* changes of climate in "Frisco," sufficient reason for lung, throat, and catarrhal affections. The well-known restriction to State Asylums of those only who are residents of the State and become insane within the State shows at least one thing—that our glorious climate does not prevent lunacy. I do not know anything of the usual per cent. of insane to population in the East or elsewhere, but that Stockton has 1600, and, although only built four or five years ago, already complains of lack of room; that Napa has perhaps as many more, and that the demands of room require a new building at Santa Clara—all go to show to me not a very favorable report.

Dr. Mays, the superintendent of the Stockton Asylum, is a man who seems to be especially fitted for his position. He is Professor of Mental Diseases in the University of California. The Doctor put me in charge of Mr. Stockwell, the supervisor, who kindly showed me carefully the entire make-up and management of the institution.

The grounds occupy 107½ acres, the male and female departments being separate affairs, at least one-fourth of a mile apart. The condition of the wards, the protection against fire, the system of prompt communication with the central office, are all that one could desire. An improvement in drainage could be made. The experiment of disposing of the sewage-matter on the land has not been wholly successful, on account of the adobe character of the soil, which had never before been cultivated. Little difficulty will be experienced during the summer season, when the ground is dry; but, when saturated thoroughly by the winter rains, the land does not absorb the offensive matter, and some plan should be adopted whereby the drainage of the asylum can be discharged into some water-channel, to be carried away by the winter's floods without becoming offensive and dangerous to the health of residents of the vicinity.

As in this climate vegetables grow the year round, about enough is raised for the demand, except potatoes. 2000 loaves of bread a day are baked, and a fine palatable article is produced. A dairy barn accomodating seventy cows of blooded stock comprises a portion of the property of the institution. Dr. Mays is quite conservative as to the use of medicines. He has found but little use for some of the newer and extolled hypnotics. Freshly prepared (always) chloral solution and the bromides are the standbyes. Moral treatment is the chief reliance, and he turns out forty per cent. of cures. The straight-jacket is abolished; straps and muffs are the only restraints used. Dr. Mays is a firm believer in the advantages of early hospital treatment of insanity. He says it is only the recent cases that recover. If the patient has been in the asylum a year and a half or two years, his prospects of restoration are fast dwindling to a vanishing point. He is sure that the fact remains that, if taken in time, in its early stages, insanity is as curable as the average run of diseases, except where there is a palpable hereditary fault. The cure-rate of those who have been insane over four years ranges *below one per cent.* A certain number of the forty per cent. dismissed cured will relapse, of course, for it is known that one attack of brain-disease predisposes toward another; but is it true, after all, says Dr. Mays, that the liability to after-attacks is any greater in affections of the brain than it is in disease of the heart, kidney, or other organ? He thinks Maudsley's estimate, that, of those discharged as cured, one-half will be returned sooner or later, over-high.

Dr. Mays has been doing good work in scattering the modern distrust of insane asylums. He delivered an address at the graduating-exercises of the Medical Department of the University of California, November 15, 1887, in which he made this subject his text. He asks how we shall account for the suspicious feeling that seems to pervade the public mind with regard to insane asylums—how account for the ready credence

given to stories of cruelty and outrage, stories either coined from the distorted brain of some half-cured patient, or else the malicious invention of some discharged employé? Why do people who in other affairs of life exercise a wise reservation of judgment join at once in the chorus of detraction? There is evidently a deep-rooted distrust on the part of the public generally. The answer to these questions is that it is a residue of a once prevalent habit of thought, of a feeling that once had good reason to exist. The traditions of centuries are not overthrown in a day. He further says: "For a thousand years the very conception of insanity was enough to strike terror to the stoutest heart; for hundreds of years a lunatic asylum was the most loathsome and dreadful of prisons—the abode of suffering and misery. These horrors were stamped, generation after generation, upon the minds of the people at large, until the memory of them has been handed down like an instinct, and this is the heritage that the modern asylum has to contend against."

PERISCOPE.

Case of Hæmatoma of the Vulva in a Non-pregnant Woman.

Himmelfarb (*Centralblatt für Gynäkologie*, No. 9, 1888) says that hæmatoma of the vulva usually occurs during pregnancy, and most frequently while birth is taking place. It has been occasionally observed as a result of direct violence. The author reports a case in which the labium was bitten immediately after coitus. The woman felt much pain, and noticed that a large swelling of the right labium majus developed quickly. She did not seek advice for a week. When examined the swelling was found to be the size of a large man's fist. It was oval in shape, and involved the whole length and thickness of the labium; it concealed completely the entrance to the vulva, and had to be drawn on one side to allow the urine to be passed. The swelling was very painful, bluish-red in color, elastic and slightly fluctuating. There were no varicose veins either of the labia or the legs. Cold compresses were applied, and after a few days' rest the pain disappeared. The swelling was then opened, the clots cleared out, and the wound plugged with iodoform gauze. The dressings were changed daily at first, and then every second or third day. The wound healed in three weeks. The case is of interest on account of the size of the swelling. All authors state that hæmatomata occurring in a non-puerperal state attain only small dimensions. Zweifel says they are never larger than a hen's egg; and Hildebrandt that they may be as large as an apple, but that, owing to the hardness and resistance of the subcutaneous and subfascial tissue, they are more sharply defined and rounder than when occurring in the puerperal state. In the case related the swelling was oval, and at least as large as a man's fist. Usually they are caused by great violence, and only a few cases have been recorded in which a slight injury has been sufficient. The only reasons which could be found for the existence of hæmatomata in three such cases the author has collected were respectively overstraining at the stool by an old woman, the lifting of heavy patients by a young nurse, and the clumsiness of a husband on the first night of his married life. Himmelfarb suggests that possibly the congestion of the parts after coitus may have had something to do with the size of the tumor.—*Medical Chronicle*, June, 1888.

Therapeutics of Hay-Fever.

Dr. Carl Genth, in a communication to the *British Med. Journal*, June 16, 1888, says that for the past ten years a young medical man of his acquaintance has suffered so severely from hay-fever from the beginning of May to the end of June that his practice has been seriously interfered with. It will be understood, as a matter of course, that he had, in succession, tried all the many and much-lauded remedies without any good result. Quinine, in large quantities, alone produced favorable results, and not before symptoms of poisoning presented themselves. It may not be without interest to mention that urticaria broke out, beginning on each side of the spine, following the course of the chief nerve-branches down the arms and legs, and finally covered the whole body. This painful state lasted for three days, at the end of which the hay-fever disappeared—leaving in the patient, however, no desire to repeat the experiment with quinine.

In a comparatively large number of cases of hay-fever, Dr. Genth has found that the primary indication of the disease is a slight twitching sensation at the inner corner of the eye. This sensation becomes more intense day by day; next follows a swelling of the conjunctiva, with all the accompanying symptoms of acute conjunctivitis. The symptoms referable to the mucous mem-

brane of the nose—asthma, etc.—set in later. These slight premonitory symptoms, which sometimes precede the final outbreak by a fortnight, and perhaps disappear with a change of weather, may easily be forgotten. But even assuming that, now and again, the disease does not begin in the eyes, but in the nose or the bronchial tubes—a possibility which, in principle, cannot be rejected—the exception would not by any means invalidate the assertion that hay-fever usually begins with the symptoms of conjunctivitis.

Upon these facts he builds his therapeutic plan. Since the first symptoms of hay-fever manifest themselves in the eye, it is probable, he says, that the agent which is to be regarded as the cause of the hay-fever (he does not here refer to the pollen grains which are everywhere present during the season in which the fever prevails, and are consequently to be found in the secretion of the conjunctiva and in the mucus of the respiratory tracts) first attacks the conjunctiva. Under favorable circumstances — such as heat—it multiplies there, and then diffuses itself over the mucous membrane of the respiratory organs, perhaps through the medium of the lachrymal canal. To be effective the condition must be attacked by local treatment, directed to the eyes at the earliest possible date.

On the advice of Dr. Pagenstecher, of Wiesbaden, Dr. Genth chose instillation and bathing of the conjunctiva with sublimate solution of the strength of one in 3,000. The bathing began, perhaps, fourteen days before the appearance of the hay-fever, whenever the patient returned home after open-air exercise. The patient was, besides, required to keep as cool as possible, and to wear pale-blue spectacles. The result of the treatment was that he remained free from his trouble for a length of time. Not before the end of June did slight irritation of the conjunctiva reappear, which, however, could not be compared in intensity with former attacks, and involved no complication. Relying, probably, upon his generally healthy condition, the bathing had not been performed with sufficient energy. Although the sublimate solution came in contact with the mucous membranes of the nose or throat only slightly, or perhaps not at all, neither of these organs was affected, which would have happened if the virus of the hay-fever passed into the body through the nose and mouth. In such an exceptional case, he says, it would be simple enough to apply the solution by a nose-douche, by gargles, or perhaps even by cautious inhalation.

Functions of the Sinuses of Valsalva and Auricular Appendices.

Mayo Collier (*Lancet*, June 16, 1888) summarizes his opinions formed from a study of the functions of the sinuses of Valsalva and auricular appendices, in the following words: 1. The sinuses of Valsalva are constant features of all mammalian and avian hearts. They are not pathological formations, but, on the contrary, are absolutely essential to the efficient action of the semilunar valves. 2. The musculi papillares serve the same purpose for the auriculo-ventricular valves as do the sinuses of Valsalva for the aortic. 3. The auricular appendices probably complete the distension of the ventricles without appreciably altering the general tension of the auricles. 4. The first sound of the heart is not due to the sudden tension of the tricuspid and mitral valves. 5. The semilunar valves open and shut gradually; the second sound of the heart being due to the sudden difference of pressure on the two sides of the valves at the moment of commencing diastole of the ventricles, causing them to vibrate. 6. At each systole the contents of the ventricle distend only a segment of the length of the aorta, the force of the ventricle exerting little influence directly on the general circulation, but indirectly by the recoil of the elastic aorta. 7. That the pulse is due to a wave of dilatation and recoil, which wave is normally single. 8. That when the arterial tension is below a certain standard, one or more secondary pulse-waves can frequently be felt, due to a redistension of the penultimate section and its consequent repeated recoil.

Use of Saccharine to Prevent Ammoniacal Change in Urine.

Dr. James Little, President of the King and Queen's College of Physicians in Ireland, in a paper read before the Section of Medicine of the Royal Academy of Medicine in Ireland, April 20, 1888, says that the management of cases of chronic cystitis has been greatly improved of late years, and as a consequence its power of inducing secondary changes in the kidneys, and so destroying life, has been greatly lessened. Of these improvements, he thinks the first place is due to the manufacture of catheters which can be easily used by the patient himself without risk, by which means the accumulation of residual urine in the bladder is prevented. At the same time, medical men have become impressed with the neces-

sity of urging scrupulous cleanliness in the instruments introduced into the bladder—a precaution which, a few years ago, was certainly neglected. As a consequence of the introduction of catheters which can be passed without pain or violence, he believes much relief has been given, and ammoniacal changes in the urine prevented by washing out the bladder with warm water or antiseptic solutions; but, he says, it has always appeared to him that it is better, if it is possible, to keep the urine free from decomposition by medicines given by the mouth, and so reduce instrumental interference to a minimum. This practice he has always followed, especially in the case of aged persons who have come into his hands, and in whom chronic cystitis constituted part of their sufferings. Unfortunately, such patients have not infrequently irritable stomachs, as well as irritable bladders; and most of the drugs which are useful in keeping the urine sweet are liable to disagree and cause sickness. This certainly applies, he says, to the remedies which were chiefly used a few years ago—quinine, tincture of perchloride of iron, benzoic acid, and benzoate of sodium. Boric acid, which has been more used of late, is not so likely to sicken, and is, he thinks, best given in lemonade.

For the past three years, he says, he has been asked, from time to time, to see a woman, nearly eighty years of age, who is quite confined to bed in consequence of chronic disease of the bladder, which gives rise to frequent and painful calls to pass water. The urine always threw down a copious purulent sediment, and, except when decomposition was prevented by treatment, was always ammoniacal. The patient has many times passed, with great suffering, phosphatic calculi, and Dr. Little thinks many such exist in the bladder, but she has always refused to permit any surgical interference beyond the occasional introduction of a soft catheter and the washing out of the bladder by a woman who acts as her nurse. Quinine and boric acid, when taken in fair doses, always purified the urine; but about three months ago her stomach became so irritable that these drugs could not be borne, and the washing out of the bladder with a weak warm sublimate solution could no longer be practiced, as the passage of the catheter had become exquisitely painful. The consequence was, that the urine became so offensive that the odor met one on the stairs, and the patient's attendants had often to leave the room to avoid being sick. In this difficulty it occurred to Dr. Little to try saccharine. He directed six of the tabloids to be used daily. In three or four days the urine was no longer offensive. The patient has continued their use ever since, and the urine has not again become ammoniacal, though there is little, if any, diminution in the quantity of contained pus.

Since the foregoing case came under his observation, he has had four other opportunities of observing the effect of saccharine in patients who were passing ammoniacal urine. They were all males: one a case of catarrh of the bladder, in a paraplegic gentleman; one a case of chronic cystitis, with enlarged prostate; and two cases, in which there had existed stricture of the urethra, but in which, although a surgeon had successfully dilated the stricture, the urine remained ammoniacal. In all these cases the saccharine was distinctly useful, but in all its administration had been combined with the daily use, by the patient himself, of a catheter, so as to prevent the accumulation of residual urine in the bladder—a precaution without which no drug will prevent decomposition of the urine.—*Dublin Journal of Med. Science*, June, 1888.

Damson-Stone Lodged in the Right Bronchus; Tracheotomy; Recovery.

The following case, under the care of Mr. Reginald Harrison, is reported from the Liverpool Royal Infirmary: Jane S., 8 years old, was admitted on April 4, 1888. Ten days previously, while laughing when eating some damson jam, she thought she had swallowed a stone. This was immediately followed by a violent fit of coughing, for which medical aid was summoned. These paroxysms of coughing were repeated at intervals. On admission, there was slight flattening of the right side of the chest posteriorly, with diminished expansion; and a rhonchus was distinctly audible. Breath-sounds feeble toward base, the rhonchus increasing in loudness as the bronchus was approached opposite the fourth dorsal vertebra, where the sound was best heard. The rhonchus was twofold, inspiratory and expiratory; and there was sometimes a sound as if something fell between expiration and inspiration. Breath-sounds on the left side normal, but with transmitted rhonchus; respirations 22; pulse 80. Whilst she was under observation in the infirmary she had several attacks of violent paroxysmal cough, when various expedients, including inversion and slapping on the back, were tried, with

the view of favoring the expulsion of the damson-stone, which evidently had found a resting-place in the right bronchus. On one occasion she expectorated a little blood, but as a rule she was going about the ward apparently well.

On April 21, she was placed under chloroform, and Mr. Harrison performed tracheotomy. An incision having been made as low down as possible through the skin, the trachea was quickly bared with a blunt director. A free incision into the trachea was then made, three or four rings being divided. Just as the child was being inverted, the stone was shot out into the wound, where it was easily seized with the fingers. A tracheotomy tube was introduced and retained for a few hours, but proved useless. The patient breathed freely through the opening, and expectorated for the first four or five days a considerable amount of pneumonic-looking sputum. Then convalescence rapidly took place, and she left the infirmary quite well fourteen days after the operation, with the wound completely healed.—*British Med. Journal*, June 23, 1888.

Peculiar Neurosis Allied to Chorea.

Dr. W. T. Gairdner, in reporting this case to the Medico-Chirurgical Society of Glasgow, April 6, 1888, said: "G. C., thirty-three years old, assistant timekeeper. This man is the subject of a kind of clonic spasm, or 'insanity of the muscles,' resembling chorea as regards the individual irregular movements, in that they are altogether non-rhythmic, and, as it were, out of all reckoning as to order and sequence; but, on the other hand, so far from affecting, as chorea commonly does, those actions most which are normally the *most* volitional and the most highly differentiated, it is in fact the opposite class that is here usually the most involved in the disease. Thus, he can carry a full glass to his mouth with either hand, and without any notable disturbance; he can walk perfectly well, can write in a good ordinary hand, which shows almost no traces even of tremor. When he is at rest in the recumbent posture, there are times when it might appear as if nothing were wrong; but if he is caused even to speak, or to make any kind of movement when in the position of dorsal decubitus, spasms come on, more or less, *but not necessarily*, or even chiefly, in those muscular groups which are thus called into voluntary action.

"I have witnessed the spasms to-day in many parts of the trunk of the body and neck—*e.g.*, the rectus abdominis, especially the left and the upper part; the platysma, and probably some of the deeper muscles in the same situation; the muscles which act upon the larynx and trachea *from without*, but *not at all* the internal muscles of the larynx; the facial muscles, grimacing spasm in a mild degree; the muscles of respiration, *only* to the degree of giving rise to slight irregularities, often attended by involuntary emission of sounds, but *not* any asthmatic or other serious embarrassment; the muscles of speech, to the extent of *only* just perceptibly affecting his articulation, but never of making him at all unintelligible. The vesical and alvine evacuations are normal; so are mastication and deglutition, so far as I have been able to discover. The knee-jerk may be taken as normal. The other reflexes have not been investigated. The disease appears to be wholly unaccompanied with pain or fever; but the patient has noticed flushing of the face at times. This used to be more frequent than it is now. The general health is good, and has always been so.

"These symptomatic details appear to me to bring the disease into a certain relation with chorea, but not with any of the tremors, properly so called, nor with paralysis agitans, or disseminated sclerosis in particular.

"The disease has persisted, more or less, for ten or twelve years; it was first observed in the facial muscles, and does not appear to have been of very sudden origin. It was recognized by Dr. Lorraine, of Castle-Douglas, at this time as 'resembling St. Vitus's Dance.' No cause can be assigned, unless it were his having got a knock on the top of his head from jumping up in an entry. He has never had venereal disease. The remedies he has had hitherto have been chiefly these, so far as he knows: 1. Arsenic (Fowler's solution) from Dr. Lorraine, in full doses, and for a long time. 2. Nux vomica, also for a long time. 3. Easton's syrup. 4. Fellows's syrup (one bottle). 5. Belladonna—which did not agree. 6. Indian hemp. 7. Phosphide of zinc. 8. Sulphate of zinc and extract of conium, together, which he thinks has checked the spasms more than the other remedies, and he has accordingly taken it in large quantities. 9. Continuous current, which he thinks did no good. 10. Blisters on back of neck, and iodine painting. 11. Cold water compresses to spine."—*Glasgow Med. Journal*, June, 1888.

Optic Atrophy in Three Brothers (Smokers).

At the meeting of the Ophthalmological Society of the United Kingdom, June 14, 1888, Mr. Edgar Browne (Liverpool) read a paper on this subject. In the first patient, forty years old, vision had failed at the age of twenty-seven. A diagnosis of tobacco-amblyopia was made. The patient reduced smoking gradually, but continued to chew. Vision had steadily failed to shadows, but the pupils were three millimetres in diameter, acted to light, and the patellar reflexes were good. Previously, vision was good; general health always good. Optic discs: typical skim-milk atrophy, with attenuated vessels. He could see a flame or bright reflection from white at the periphery of the fields. The second patient was thirty-three years old; sight became very bad six months before; he also both smoked and chewed tobacco; he could see a little in twilight. The knee-jerks were good. Pupils, three millimetres in diameter, acted to light. The optic discs showed a general appearance of atrophy; vessels pervious, but rather small. He could see white paper test in lower temporal (right) and lower nasal (left) fields, but not at all centrally. In the third patient, vision had failed for two years, patient being twenty-three years old; could read J. 16. This patient discontinued smoking when warned. Pupils sluggish, but acted to light. Peripheral fields for white: both eyes normal; central scotoma for white and red in left eye, for red only in right; color-vision with wools good. Optic discs very white and smooth; veins perhaps a little large. The original assumption that tobacco could cause atrophy had been rather discredited since the significance of axial neuritis had been understood. These cases, he said, were closely related to the hereditary optic atrophy of Leber (though occurring rather late), but the term hereditary should not be adopted till our information was much more exact. In all three cases, tobacco was probably the determining cause of the atrophy. In all, perception of light was better toward periphery than centre; none had visible neuritis; none had cerebral or spinal symptoms. The father, mother, and two sisters had good sight; a collateral relation had suffered. These cases might be taken, he said, as types of one group—namely, those in which an axial neuritis being once established tended to spread to the peripheral fibres, involving both sets in the subsequent atrophy. Exactly the opposite occurred in ordinary neuritis, in which the central fibres (and vision) might escape for a time. The following grouping of cases was suggested: 1. Ordinary tobacco-amblyopia, involving only central fibres; transient, and recovery occurs on removal of the cause. 2. A class beginning with central negative scotomata, which progressed downward till central defect became positive (or nearly so), and axial atrophy might be assumed, peripheral vision being unaffected. The part played by tobacco in these cases required investigation. 3. Cases like those under consideration, in which retro-bulbar neuritis, beginning centrally, spread peripherally, giving rise to more or less pronounced atrophy. Here, he said, the personal proclivity was shown in young persons, members of the same family. If similar groups were found among non-smokers, search would not be required to discover the exciting agent. Beyond these were (4) consecutive atrophy, and (5) atrophy accompanying spinal degeneration. At present the two last groups were well understood, but cases illustrating the second and third groups should be collected. Mr. Hutchinson mentioned a group of three, consisting of two young males who smoked, and the mother of one of them (and aunt of the other) who did not smoke, all affected with optic nerve atrophy. In the case of the woman, the inherited predisposition to nerve lesion must have been very strong. Eventually she became quite blind, but had very good health. Perhaps abuse of tea or coffee might have had a share in bringing about this effect; he was sure that they sometimes caused deafness. He thought the society might investigate the very rare group of women affected with this form of atrophy who did not smoke at all. Mr. Browne had mentioned that his first patient was a total abstainer; this, Mr. Hutchinson thought, rather led to the production of the atrophy than the reverse. Those who indulged in alcohol as well as tobacco were less liable to tobacco atrophy than were abstainers. These cases occurring in families were much more severe, more liable to end in blindness, and much less easily cured than the other forms. Dr. Emrys-Jones mentioned the case of a family of nine children, but only five living, in which two children had atrophy of the optic disc without definite cause, the girl at the age of seventeen and the boy aged nine; total blindness ensued.—*British Med. Journal*, June 23, 1888

—Dr. Y. D. Harrington, of Terrell, Texas, died June 11, 1888.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

LAPAROTOMY FOR TUBERCULAR PERITONITIS.

A large number of cases are now on record, in which the abdomen has been opened to determine the nature of some obscure disorder, with the result of discovering extensive tubercular deposits in the peritoneum. In these cases, the surgeon has usually carried out a thorough cleansing of the abdominal cavity with some disinfectant solution, adding at times an application of powdered iodoform to the affected surfaces, and afterward closing the wound—the whole procedure being called an exploratory laparotomy. When this was first done, it was with a sense of disappointment, and the operation was regarded at best as one which did not often imperil the life of the patient. But after a while it was noticed that patients so treated often improved manifestly after the operation, and men began to associate the idea of this improvement with those ideas of the nature of tuberculosis of the peritoneum which König has, since 1884, done so much to impress upon the mind of other surgeons. According to these ideas, tuberculosis of the peritoneum is not a mere manifestation of a general disease, but a local affection, and amenable to local treatment, just like tuberculosis of the bones and joints.

As might have been expected, the fortunate issue of operations which may be regarded as accidental *quoad hoc* led to the proposition that the abdomen should be opened and the peritoneum subjected to direct treatment, as a formal method, when there was good reason to believe or to suspect that it was affected with tuberculosis. Not only has this proposition been made, but it has been also carried out in a considerable number of cases. The results have been eminently satisfactory. A year ago, Kümmel reported to the sixteenth Congress of German Surgeons the history of forty cases of laparotomy in tubercular peritonitis. In only two cases did death soon follow the operation; in three of them the patients lived from five to twelve months and then died of general tuberculosis; in two a coincident tuberculosis of the lungs progressed, but no new symptoms of peritonitis appeared. In the rest of the cases the improvement was so great as to lead to Kümmel's calling it a cure. In fact, he is so convinced of the value of laparotomy that he speaks of these operations as having led to improvement in every case, and to recovery in the majority of them, and pronounces the unqualified opinion that tubercular peritonitis is a disease which may be not only relieved, but also absolutely cured. For this purpose he strongly recommends an exploratory laparotomy combined with thorough washing-out of the abdominal cavity, as an operation which promises results which render the risks inconsiderable.

The opinions of Kümmel are shared by a

number of able surgeons in Germany and in America, and deserve very thoughtful consideration. We do not feel that the statistics upon which they partly rest are absolutely demonstrative; but we have no doubt that experience justifies the operation of laparotomy for tubercular peritonitis, and especially when the peritonitis is of an active and threatening character. It seems clear that the operation, in skillful hands, is not one of great risk to life, and that its results are generally beneficial, at least for a while. This is enough to give it good standing among the operations of surgery, and the possibility that it may sometimes be followed by recovery makes its position impregnable.

THE MORRIS PLAINS ASYLUM.

Sometime ago, charges were made that the Morris Plains Asylum for the Insane, in New Jersey, was grossly mismanaged. It was asserted that food and medicine of bad quality were furnished to the inmates, and that the internal government of the institution was improperly conducted. The most prominent accuser was Dr. McFarlane. His accusations had an appearance of veracity, and were no great surprise to persons familiar with other institutions managed by politicians. But they have been denied, and are even now being made the subject of investigation by a committee of the New Jersey Legislature. It happened, on July 9, that Dr. McFarlane and Mr. Halsey, President of the Board of Managers, were on the same train, proceeding to the meeting of the committee, and it is painful to learn that Mr. Halsey "denounced Dr. McFarlane to his face as a lying scoundrel," and not surprising to be informed that thereupon Dr. McFarlane "appeared much disconcerted."

Those who share Mr. Halsey's opinion will be strengthened in their faith by the testimony of various people who supplied goods to the asylum, that their wares were always of the best quality and of full weight, and that they had great confidence in the integrity of the purchasing officer of the asylum.

On the other hand, those who sympathize with Dr. McFarlane may not at once abandon him to his fate because he has been assailed with abusive epithets by a man whom he has made to feel very uncomfortable, or discredit the charges of maladministration against the Morris Plains Asylum because a number of witnesses, implicated in these very charges, intimated their disapproval of him and their entire satisfaction with themselves.

The fact is, the case seems to be conducted too much in the fashion usual for "investigating committees," and there is some reason to fear that it may come to the customary conclusion. But the matter is so important that it is to be hoped it will be thoroughly sifted. If the Morris Plains Asylum has been properly managed, it will be well to have the fact clearly demonstrated; for there have been many who thought this was not the case. On the other hand, if the managers have been unwise or corrupt, the interest of humanity and the credit of a great State are involved in ascertaining the fact and correcting or punishing what has been wrong. The treatment of the insane is one of the most serious responsibilities of those who enjoy their reason and civil rights. Happily, this responsibility is more fully appreciated and better met nowadays than ever in the history of the world; and even such painful episodes as the one going on at Morris Plains have their uses, and indicate the wrongs which still exist far less than they show the wrongs which have been abolished, and the kind and humane sentiment which in this age watches over the rights of the unfortunate class of the insane. The eyes of all managers of hospitals for the insane are turned to what is going on at Morris Plains, and the issue cannot, we believe, fail to be helpful to them in the conduct of those institutions with which they are connected.

A FRENCH CRITIC ON AN ENGLISH WRITER.

In a review of a book on "The Passage of Air and Fæces from the Urethra," by Mr. Harrison Cripps, of London, M. A. Broca, writing for the *Gazette Hebdomadaire*, June 29, 1888, takes the author to task for speaking with the air of an authority upon the subject from knowledge derived exclusively from works published in the English language. Mr. Cripps, as is well known, has made some important contributions to our knowledge in regard to diseases and malformations of the rectum and anus, and is in many respects an author of distinction. But in his last book he has laid himself fairly open to the criticism referred to. And, the matter is a little worse than his reviewer makes it; for the studies which M. Broca says Mr. Cripps has overlooked, and which convict him of error, have already been communicated to English readers—in this country, at least.

The matter in question is of less consequence than the principle involved in M. Broca's criticism—namely, that it is dangerous to speak dogmatically on scientific subjects with insufficient preparation. Aside from the error in regard to a question of pathology pointed out by M. Broca, it appears that Mr. Cripps has made the mistake of attributing the revival of suprapubic lithotomy to the work of Sir Henry Thompson. M. Broca says—what is perfectly true—that Sir Henry Thompson is but a recent convert to suprapubic lithotomy; and he does not say—what is equally true—that Sir Henry got the courage to practice suprapubic lithotomy, and learned the way to do it, from Guyon, of Paris. The conversion of Sir Henry Thompson to the practice of suprapubic lithotomy undoubtedly did more to convert the whole body of English surgeons than all that had happened for nearly fifteen years in America and on the continent of Europe; but this is not a fact especially creditable to their independence of authority or their acquaintance with what is going on outside of Great Britain.

There is a moral in all this, to be drawn by other writers and workers than those of England. The field of medical science is too large to be viewed exclusively from the standpoint of any one nationality, and those who wish to speak with authority on any subject in it should be careful that they do not overlook those who have made important contributions to it in other lands. If they make this mistake, they are sure to do injustice to those who have preceded them, and run the risk of falling into mortifying errors themselves.

AN EXPLANATION.

A few weeks ago we received a letter from a medical man in New Jersey who was displeased with a statement made by our correspondent in Cincinnati during the last meeting of the American Medical Association, and published in the REPORTER, May 12, 1888. The statement was, in effect, that the representative of New Jersey in the Nominating Committee did not vote or act in accordance with the instructions of his delegation in a certain matter. The letter referred to contained no denial of the allegation of our correspondent, and no justification of the conduct attributed to the writer; beside this, it was so unfortunately composed that—especially as there was no intimation that it was intended for publication—it seemed an act of kindness simply to acknowledge its receipt and file it away.

It is hard, however, to know what people want. In about a week more, a medical journal of this city published a copy of this very letter, with a sensational heading, and accompanied it with an editorial which showed an utter failure to appreciate the consideration we had shown for its author.

This is one of those things which sometimes provoke an editor; but we will not return railing for railing; our contemporary will, we trust, see that its criticism of the

REPORTER was due to a misapprehension, and be sorry for it.

We owe it to our Cincinnati correspondent, however, to say that he, as a news-gatherer, reported simply that a person, whom he indicated in such a way that only those whose business it was could know who was meant, had disobeyed the instructions of those whom he represented. The proper way to meet a charge of this sort is either to disprove it or to show that what had the appearance of wrong was, in fact, right. For either of these purposes the columns of the REPORTER are open to the person concerned. If our correspondent was misinformed, we will not hesitate to publish the fact; if his information was correct, but the circumstances justified the conduct of the delegate from New Jersey, we will let him show this in the REPORTER. But we cannot admit to our columns mere recriminations, or protestations as to the quantity of honor residing in small parts of any man's body. Finally, we would not have given so much space to this matter were it not that it concerns the American Medical Association and the profession in New Jersey quite as much as it does an individual to whom we by no means wish to do any injustice.

CORRESPONDENCE.

Anecdotes of Dr. Tuttle.

Dr. Socrates Tuttle, who settled in the town of Barnet, Vt., in the first part of the present century, and died there several years since, was full of fun and very fond of practical jokes. The following are told of him:

One day he met one of his neighbors who was always fishing and hunting without success, and withal very lazy; and he addressed him thus: "You seem to be a great hunter and a good marksman; now I have a patient who is very sick and is sure to die unless I can get an owl's gizzard to feed him; if you will get me one I will give you nine shillings for it." The hunter's knowledge in comparative anatomy was about equal to his success in hunting, so he started off early the next morning in pursuit of an owl, and although there was a pouring rain all day, he traversed the forests, impressed with the desire to save the life of the doctor's patient if possible. Just at dusk when it was so dark that he could scarcely see to take aim he discovered a small owl perched upon the limb of a tree, which he shot and carried home. The next day the doctor inquired if he had got that gizzard for his patient. The hunter replied: "I was out in the rain all day yesterday and just at dark shot an owl; I cut it open but *it hadn't a sign of a gizzard.*"

The doctor had two acquaintances in his beat, who had become impressed with the belief that when Roger's men were returning from Canada, being in a starving condition, they buried considerable gold and silver coin on the island near the mouth of the Passumpsic River. They talked with the doctor about securing this prize. He advised them to go in the night when nobody would be around to disturb them, and make but little noise while they were digging. He told them that, when they got within a few inches of the treasure, ghosts would make their appearance and try to frighten them away, but that they must pay but little attention to them unless they came too near when one of the party must read a passage from the Bible which would surely disperse all evil spirits. The doctor told them to go that night, and rolled up an old Latin lexicon, in place of a Bible, which they took along with them without opening it. About dark they started off in a small boat, and commenced to dig soon after reaching the island. The doctor arranged with three of his old chums to take a boat and land on the opposite side of the island, and walk over noiselessly where the diggers were at work dressed in sheets. The three ghosts got within a few feet of the money-diggers before being discovered, in the dim glimmer of their tin lantern. They were very much frightened and one of them unfolded the Bible and hunted for a passage but could find nothing that he could read, at the same time the ghosts were slowly approaching the spot, and in desperation improvised the following passage which he thought would be effectual: "In the name of this good book I command thee to depart." The ghosts approached a little nearer. The passage was repeated, but the ghosts continued to approach, slowly, without any change in their countenances. The passage was repeated the third time, and the ghosts still, slowly, continued to approach. By this time the money-diggers were so frightened that they threw their tools and lexicon

into the river, jumped into their boat, and paddled for the shore. The doctor's old lexicon came to pieces and some of the leaves were picked up on the shores of the Connecticut River as far south as Springfield, Mass. The money-diggers never heard the last of that expedition, and Dr. Tuttle never ceased telling the story as long as he lived.

JOHN M. CURRIER.

Newport, Vt.,
July 1, 1888.

Tait Versus Battey.

TO THE EDITOR.

Sir: I have just received a marked copy of THE MEDICAL AND SURGICAL REPORTER of June 2 which contains a paragraph headed Battey versus Tait, and I trust that in fairness you will allow me to state briefly the other side of the case.

Dr. Battey's attack is much to be regretted chiefly for the reason that if he were to spend half as much energy in fighting those who oppose the progress of abdominal surgery as he does in abusing those who are concerned for it, he would do more good in the world.

In the *Atlanta Medical Journal* for January, 1887, an attack on me by Dr. Battey, more or less similar to the present, appeared and was replied to by me. That reply contained a full statement of the facts, and those facts Dr. Battey entirely ignores.

Let me briefly re-state them, not as a reply to Dr Battey, but as a method of clearing out some of the difficulties of this complicated question.

Dr. Battey says that he has sat too modestly in his chair and allowed me to talk about "my (Tait's) operation."

The absolute opposite of this is the fact. Whilst Dr. Battey has been shouting aloud for years that removal of normal ovaries should be called "Battey's operation," I have constantly urged that nothing should be called "Tait's operation." Let me call to witness numerous discussions on this side of the Atlantic, and the well-known discussions with Dr. Thalbow and Dr. Coe on your own side. Calling operations by people's names is a lazy habit, sure to breed confusion, and it has done so to a fearful extent in the present instance.

Operations should be named either on account of a leading principle involved or on account of some special, prominent, and distinctive detail. The removal of ovaries "with the theory that the cure would depend upon bringing about change of life by the removal of the ovaries" was a proceeding which seemed to Dr. Marion Sims to have an intelligent and leading principle. But Dr Sims was burdened with the notion, now abolished, that ovulation was the cause of menstruation, and therefore his wonderful enthusiasm overcame his feebler judgment, and he rushed the proceeding into popularity as "Battey's operation." Without Dr. Sims's pamphlet the theory never would have been heard of, and it is a thousand pities he ever wrote about it. His charming inconsistency alone proves this, for we find him saying that "the experience of all ovariotomists proves conclusively that the removal of one ovary will not do this" (bring about the change of life), and yet we find Dr. Battey ignoring his theory at the very outset, and removing but one ovary in the second case in which he operated; and he did the same thing in his fourth and fifth cases. We see here, therefore, that Battey had really no principle at all to go upon in his experiments, and that Sims was wholly inconsistent in his conceptions of them.

The result of it was that all over the world "Battey's operation" was recognized as what he himself called it, "normal ovariotomy," and "normal ovaries" were whipped out in this country, I know, and I think also in America, by the bushel, heedlessly and only because Marion Sims had praised "Battey's operation." In your columns Dr. Battey repeats all this by saying that he "operates for the change of life." I say again that I have operated on this principle only six times, that all my cases made easy recoveries, but that the ultimate results have proved so unsatisfactory that I entirely condemn "Battey's operation."

I confine my operations to cases where there is actual, physical, and tangible disease in the uterine appendages, and I object to any operation being named after me, because that style of nomenclature involves neither leading principle nor essential detail.

Dr. Battey says that I said nothing about this till 1879. This is not true, as my first publication on the principle was in 1873. My first case was operated upon on February 11, 1872. Dr. Battey says Mr. Tait found it necessary to resurrect a patient at the Congress in 1881 who was recorded dead years before "in his own handwriting" This is not true at all The death was not recorded by me at all, but the records of two patients were confused, and not the patient resurrected, but the proper detail of the

operation correctly supplied. All this was explained and proved to Dr. Battey before witnesses and by the patient herself, in August, 1881, in my own house, and if Dr. Battey had any skepticism on the subject it was then and there he ought to have displayed it, and not in your columns seven years later. Dr. Battey prays that he may be prevented falling into my ways, but the style and direction of the prayer reminds me of the incident when two men went up into the temple to pray, and the one who prayed was a Pharisee.

Yours, etc., LAWSON TAIT.

Chlorate of Potash Poisoning.

TO THE EDITOR.

Sir: Please let me know through the REPORTER what is to be done in chlorate of potash poisoning, if an over-dose has been given, and oblige

Yours truly, SUBSCRIBER.

July 11, 1888.

[As most of the reported cases of chlorate of potash poisoning give evidence of acute gastro-enteritis with nephritis, a rational treatment would be that appropriate for poisoning with any irritant — demulcent drinks and the like—combined with measures suitable for the congestion or inflammation of the kidneys—dry cupping over the loins, etc. If collapse is threatening, alcoholic and diffusible stimulants are, of course, to be employed.

There is no antidote and no specific treatment. EDITOR OF THE REPORTER.]

NOTES AND COMMENTS.

Purpura Rheumatica.

Dr. Wm. Osler says in the *Canada Med. and Surg. Journal*, June, 1888: "There are certain disputed points in the clinical history of purpura rheumatica (the peliosis rheumatica of Schönlein) which are illustrated by the following case: A. B., thirty years old, seen with Dr. J. H. Musser. He had been a tolerably healthy man. In March, he had a severe sore throat, which kept him at home for a couple of weeks. He returned to work, but in ten or twelve days the sore throat again came on, with fever and swelling of the left ankle. I saw him on the fourteenth day of the illness. The symptoms had been fever of moderate grade; arthritis, chiefly of right ankle, but other joints were also sore and stiff; an extensive purpuric and urticarial eruption, beginning on lip and eyelid and extending to limbs, chiefly on extensor surfaces; great swelling and finally sloughing of uvula; profuse sweats, and endo-pericarditis. At the time of my visit, the purpura was fading, but the rash was still most extensive on the legs, and was both petechial and presented the characters of purpura urticans. A considerable portion of the uvula had sloughed away, and the fauces had a deep bluish-red color. The heart-beat was outside the nipple-line; there was pericardial friction, and a systolic murmur could be heard at the apex.

"The question arose whether we had not a case of malignant endocarditis, with the extensive cutaneous infarcts so common in this disease; but the large size of the hemorrhagic spots, their swollen condition, and the fact that some of them began like 'hives,' pointed to a purpura urticans associated with articular and cardiac disease in a case of rheumatism. The joint-affection, profuse sweats, and endo-pericarditis indicate the true rheumatic nature of cases of this kind. The sore throat, so marked a feature, existed also in a remarkable case of peliosis rheumatica which I saw with Dr. Molson in 1880, and which is recorded in Vol. IX of this journal. The patient had three attacks of tonsilitis within five weeks. Sloughing of the uvula, such as occurred in Dr. Musser's patient, is occasionally met with in acute rheumatism: I recorded an instance in Vol. VII of the journal. And lastly, the existence of endo-pericarditis is worthy of note, as certain authors have laid stress on the fact that it does not occur in rheumatic purpura."

Poisonous Canned Food.

Dr. Geo. Hay, in a communication to the *Pittsburgh Med. Review*, June, 1888, says that on several occasions, during the past four or five years, he has observed that, after eating about four ounces of canned lobster or canned salmon, he has been attacked with very marked symptoms of acute saturnine poisoning. He therefore resolved to investigate, and in doing so noticed that, on the inside, the cans were generally much eroded. On the outside, they are covered with a label and also with a yellow varnish, whose main purpose, he says, seems to be to conceal the natural color of the so-called tin plate. Having removed the varnish by an appropriate solvent, he carefully scraped a quantity of the metal from the surface of the tin plate, at the same time cautiously avoiding contact of the steel scraper with the solder. Two samples obtained in this manner, one

from a lobster-can and the other from a salmon-can, were carefully analyzed. The following is the mean of the two closely agreeing analyses expressed in percentages:

Tin	13.76
Lead	61.92
Iron (with traces of other metals)	24.32

The greater portion of this iron, he says, was doubtless taken up from the iron plate upon which the more fusible alloy was superimposed. A small portion of the iron was probably an impurity in the original alloy. Looking at the above figures, it will be seen that the original alloy consisted of about one-fifth tin and four-fifths lead. Commercial block tin ought to contain about 99 per cent. tin, and is the material with which the tin plates ought to be coated. To put food, which is intended to be eaten, in wrappers of lead, he declares to be simply villainous, and urges that the scoundrels who do so ought to be punished. Chemistry, in his opinion, is rapidly becoming a low art, prostituted to the still lower art of money-grabbing.

Quarantine at San Francisco.

The *Pacific Medical and Surgical Journal*, June, 1888, says: "San Francisco claims a population of more than 300,000, and boasts of being the leading city of the Pacific Coast of America. Its quarantine establishment consists of a steam tug-boat and one medical officer, now temporarily supplemented by an assistant, for whose compensation there is no legal provision. No apparatus for disinfection nor accommodation for people under detention has been provided, for the law-making powers have furnished no means. In their absence, the steamship companies employ hired vessels anchored in the bay, where these persons, sometimes numbering hundreds, are maintained at heavy expense, estimated at about $150,000 for the months of February, March, and April. This is a single step in advance of the Turkish method of detaining ship, crew, passengers, and cargo, for an arbitrary period. Fumigation has been practiced here, in a primitive fashion, but the principal element is specific detention for the maximum period of incubation, and the rule has been extended to white passengers and pock-marked Chinese, in common with the rest; justification being found in the discovery of two well-marked secondary cases of small-pox among the coolies. Vaccination has not been practiced at quarantine during the present season, until within the last month; and indeed this would be a poor reliance with such results as have lately been obtained at the Health Office among the inhabitants of the city."

Poisoning with Gelsemium.

A case of poisoning with a preparation of gelsemium sempervirens took place recently, in Toronto, Canada. A prescription containing quinine and fluid extract of gelsemium was dispensed for a woman suffering with neuralgia, the directions being that a teaspoonful of the medicine should be taken three times a day. The remedy did not prove effectual, and the patient took it upon herself to administer six teaspoonfuls at once, with the effect of producing symptoms of acute poisoning. Medical aid was summoned, and, by liberal treatment with tincture of nux vomica, a fatal result was averted. —*Canadian Phar. Journal*, July, 1888.

Sudden Death from Fear.

It is well known, says the *Wiener med. Presse*, May 27, 1888, that profound mental impressions are capable of producing, not only transient and lasting disturbances of the central nervous system, but even now and then sudden death. In the *Münchener med. Wochenschrift*, No. 20, Bollinger reports a case of sudden death from fear in a prisoner. It seems that a farm-laborer, sixty years old, in a fit of anger struck another man on the head with a pitch-fork, inflicting two wounds involving the skull. The injured man died of pyæmia. His assailant was imprisoned, and became extremely depressed and melancholy. On January 30 he did not seem to be quite well, but first complained of illness on the next day, when he had to appear before the jury as defendant. Here he became so miserable that he had to be carried away, and had the appearance of a man moribund. The skin was cold; there was no pulse, but repeated attacks of fainting. He was taken to the hospital, where he died in twenty-four hours. At the autopsy, his organs corresponded with the relatively good state of health which he had enjoyed before the occurrence just described, and no such changes were found, especially in the brain and heart, as could be charged as contributory to the direct cause of death.

Subsidence of Doubtful Tumors.

Dr. David W. Cheever, Professor of Surgery in the Harvard Medical School, in a paper read before the Suffolk District Medical Society, April 4, 1888, says that cases

of tumor are frequent in which an operation is not indicated, either on account of poor health, of age, or of the extent of the disease. He reports eleven cases in which tumors of a doubtful character subsided under the use of alterative medicines. The alteratives employed were iodide of potash, iodide of iron, bromide of potash, and occasionally mercury in some form, and arsenic.

In conclusion, he says that in the course of his practice he has once seen a case in which no arsenic could be tolerated, and twice cases in which the iodides could not be borne. He has had no success with Chian turpentine, but is now trying chloride of lime (an old remedy) for glandular enlargements.—*Boston Med. and Surg. Journal*, June 21, 1888.

Treatment of Ozæna with Naphthol.

At the recent congress of the French Society of Laryngology, Dr. Ruault recommended the treatment of ozæna with naphthol. He washes out the nasal cavities three or four times a day with a solution made by dissolving in a quart of water a teaspoonful of a solution of equal parts of borax and bicarbonate of soda, and a coffeespoonful of a solution of

Naphthol β	ʒ iii
Alcohol (90 per cent.)	f ʒ iiss

In very obstinate cases, the cavities are washed out, and then tamponed for fifteen minutes with cotton saturated in:

Naphthol β	ʒ iii
Tincture of quillaia	f ʒ iii
Distilled water	f ʒ xiii

The advantages of this treatment are a rapid disappearance of the odor, and a marked diminution of the secretion. The only objection to the naphthol is that, immediately after its employment, slight burning occurs, which very soon subsides.—*Wiener med. Presse*, June 17, 1888.

Glycerine Suppositories for Constipation.

The employment of injections of glycerine as purgatives is objectionable in persons with hemorrhoids or in those with irritable mucous membrane of the rectum which bleeds easily. When these conditions are present, the nozzle of the syringe has to be manipulated with great care. Boas has recommended (*Deutsche med. Wochenschrift*), as a substitute for the injections, suppositories of glycerine. He uses those made by Sauter, the largest of which contain one gramme of pure glycerine. These suppositories keep their shape and activity after being kept a week. Fifteen or twenty minutes after being inserted, there is an active call to stool, but it is unattended with tenesmus or other difficulty, and, as a rule, is quickly followed by an evacuation.—*Wiener med. Presse*, June 17, 1888.

Anthropometry.

At the Anthropological Institute of London, April 24, some interesting figures were, according to the *Lancet*, May 5, 1888, given in regard to the head-growth of Cambridge students. It seems that during the recent health-exhibition at South Kensington over nine thousand persons were measured in Mr. Galton's laboratory, and a comparison of these measurements with those of the Cambridge men gives a result strongly in favor of the latter, as the following table clearly shows:

	Height.	Weight.	Breathing capacity.	Pull.	Squeeze.
Cambridge,	68.9	153.6	254	83	87.5
S. Kensington,	67.9	143.0	219	74	85.0

These figures point to the high physical condition of the upper educated classes, and a comparison of these figures with those derived from the statistics collected by the anthropometric committee of the British Association shows that the average Cambridge student is distinctly above, and the average visitor to the exhibition about as much below, the mean of the general population in these particulars. The comparative brain-capacity was calculated by multiplying together the maximum length, maximum breadth, and height above a plane passing through the meatus auditorius and immediately beneath the superciliary ridge. The men were divided into three classes: A, first-class honors men; B, all other honors men; C, "poll" men and failures. It was shown that the heads in class A were distinctly larger than those in class B, and that while both gradually increased in size from the age of nineteen to twenty-five, the superiority was steadily maintained. In the case of class C, which started with a smaller head than either A or B, the size increased with much greater rapidity than in either of the other classes up to the age of twenty-two and a half, when the curve was found to cross that of class B; and at the age of twenty-five the size of the head of the average "poll" man, although considerably less than that of the "first-class" man, was slightly larger than that of the ordinary honors man.

Recent Mortality in New York.

The New York *Herald*, July 18, says: "The Sanitary Bureau reports that, for the week ending June 30, there were 1038 deaths registered in its office. This represents an annual death-rate of 35.37 per 1000 on an estimated population of 1,525,981. This is by far the greatest mortality in any one week reported up to that date during the present year. The total number of deaths from January 1 to June 23 was 18,684, and the weekly average was about 778, or 259 less than in the week ending June 30.

"This extra mortality of 259 in the last week of June probably represents the morbific effect of the hot summer weather, most fatal in cases of sunstroke, cholera infantum, and other enteric diseases. It is, perhaps, the most striking and conclusive demonstration that can be had of the necessity at this time for thorough sanitation of household premises and of great prudence in the care of the young. Though there has been an abnormal abatement of the deadly heat this month, its return with the dog-days will be more severely felt by contrast with the recent cool spell."

Gonorrhœal Ophthalmia.

At the meeting of the British Gynecological Society, June 13, 1888, Dr. Burnie read a note on gonorrhœal ophthalmia. Referring to his observations at the last meeting, he wished it to be understood that he looked upon gonorrhœal ophthalmia and purulent ophthalmia of infants as two distinct affections. The former occurred only in subjects suffering with gonorrhœa, never in second parties. It had never, in the experience of Dr. Burnie, affected both eyes, but might do so. It was not caused, in his opinion, by direct contagion, or else it would be much more frequent, but was due to metastasis, similar to gonorrhœal synovitis. The appearance of the eye was also different from that presented by eyes in which direct infection had taken place by means of towels, etc., as Dr. Burnie had repeatedly seen. The semi-ptosed condition of the eyelid was especially characteristic. In purulent ophthalmia of infants, the disease usually attacked both eyes, and was caused by direct infection.

Dr. Bell agreed very much with what Dr. Burnie said about gonorrhœal ophthalmia as distinct from purulent ophthalmia. He thought the former might be caused without direct infection, but that it might also be caused by direct infection. Diseases of metastatic nature in the eye were well known, such as iritis.

Dr. Woods remarked that he had never seen a case of gonorrhœal ophthalmia or rheumatism among soldiers, while he had seen several cases among officers. He thought this was against the view of direct infection and in favor of the metastatic nature, as direct infection would be more likely to take place among patients of a lower class.

Dr. Hime could not concur in Dr. Woods's conclusions. He thought direct infection was caused by want of care and cleanliness, both of which were exercised in the cases of soldiers much more than in the cases that came under observation in the ordinary hospitals. Experiments had proved that urethritis could be inoculated from gonorrhœal ophthalmia, but not from synovitis, and he thought gonorrhœal synovitis might often be identical with ordinary synovitis from other causes.—*Medical Press and Circular*, June 23, 1888.

Southern Surgical and Gynecological Association.

The meeting of the Southern Surgical and Gynecological Association will be held September 11, 12, and 13, 1888, at Birmingham, Alabama. A number of interesting papers have been promised by the leading surgeons and gynecologists of the South. The programme will be announced later. Dr. W. E. B. Davis, of Birmingham, is Secretary of the Association.

NEWS.

—Dr. H. L. Burritt, of Bridgeport, Conn., died July 11. He was graduated from Yale in 1844.

—Dr. Emil Grunmach, of the University of Berlin, has been granted the title of Professor.

—Dr. Valerian Tashkevich, Professor of Clinical Therapeutics in the University of Kharkoff, is dead.

—Dr. Fürbringer, of Amsterdam, has been chosen Professor of Anatomy in the University of Jena.

—Seventeen deaths from yellow fever are reported from Havana, Cuba, for the week ending July 7, 1888.

— Professor Virchow has been awarded the Boerhaave Medal for Anthropology by the Haarlem Scientific Society.

—Small-pox has made its appearance in the Polish quarter of Buffalo, N. Y. Eight cases were reported up to July 17.

—Dr. Robert D. Weeks died at his residence in Philadelphia, July 18.

—The American Gynecological Society will meet in Washington, September 17 to 19, instead of in Boston, as at first intended.

—Mr. Arthur Hare, principal assistant to Professor Chiene, of Edinburgh, has been appointed Professor of Surgery in Owens College, Manchester.

—A sanitary inspection of the public school-houses of Philadelphia is now in progress. A number of serious defects in drainage have been reported.

—A family, consisting of nine persons, was poisoned in Philadelphia, July 15. The source of the poison is supposed to be in some canned tomatoes. All have recovered.

—Professor Adamkiewicz has been promised increased clinical facilities in the University of Cracow, and, in consideration of this, has been induced to withhold his resignation.

—It is stated that some silly Parisian mothers have aroused the just indignation of the medical profession by painting the faces of their children, and dyeing their eyebrows.

—Dr. Bass Rawson, of Findlay, Ohio, who celebrated the 89th anniversary of his birth July 14, is one of three brothers, all practicing doctors. The oldest is 92 years old, and the youngest 84.

—At the commencement exercises of Union College, New York, June, 1888, the honorary degree of LL.D. was conferred upon Mr. Lawson Tait, F.R.C.S., Professor of Gynecology in Queen's College, Birmingham, England.

—The following cases of, and deaths from, infectious diseases were reported in New York City for the week ending July 17: Typhoid fever, 40 cases and 12 deaths; scarlet fever, 460 cases and 93 deaths; cerebro-spinal meningitis, 21 cases and 16 deaths; measles, 898 cases and 84 deaths; diphtheria, 481 cases and 147 deaths; small-pox, 13 cases and 2 deaths.

—The medical officer in charge of the Marine-Hospital Service at Ship Island Quarantine Station, Mississippi, reports that the captain and four men died of yellow fever on the Norwegian bark "Magnolia," on the voyage from Rio Janeiro. The vessel was bound for Pensacola, Fla., and is now undergoing quarantine at Ship Island, having been sent to that station by the Pensacola health authorities.

HUMOR.

He—"I see that old Mr. Bently was buried yesterday." Wife (shocked)—"Why, is old Mr. Bently dead?" He (who has just been "sat upon")—"The paper doesn't say whether he is dead or not; simply that he was buried yesterday."—*Life.*

Thunder and Lightning.—Lightning-rod agent (to boy)—"Is that your father lying there in the shade, sonny?" Boy—"No, sir; pa's away, an' me and ma is the only ones to home; that's a dead book-agent. D'ye want to sell ma anything?" "Thunder, no," said the lightning man.—*The Epoch.*

"I had my picture taken to-day," said little Christine. "I crossed my arms and leaned on a chair, and the picture-man put my head in some tongs." "Why, you must have looked like a lump of sugar in sugar-tongs," laughed papa. "Why, so I must have," said Christine, delightfully, "'cause the man kept saying: 'What a sweet little girl.'"—*Religious Record.*

Johnny was Anxious.—"Won't we get any dinner to-day, ma?" asked little Johnny McSwilligen, rather anxiously, as the congregation sang the closing hymn at the morning service last Sunday. "Of course we will, Johnny," whispered his mamma. "What put that question into your head?" "Why, everybody's singing 'We're going home, to dine no more.'"—*Pittsburg Chronicle-Telegraph.*

OBITUARY.

HORTENSIUS W. PURNELL, M.D.

We regret to learn that Dr. H. W. Purnell, an old subscriber to the Reporter, died July 3, 1888, at Hot Springs, Arkansas. He was born June 17, 1838, in Green County, Alabama. Dr. Purnell had been in ill health for some time, but none of his friends anticipated an early death. He abandoned his practice only a short time ago and went to the Springs. He was a graduate of the University of Louisiana, and for a number of years a resident student of the Charity Hospital in New Orleans. On the breaking out of the war, he joined the medical department of the army on the Confederate side, and (except for two months, while stationed in the hospitals at Holly Springs, Miss., until the evacuation of Corinth, after the Shiloh battle) was in the field medical service until the close of the war. In 1865 he moved to Memphis, and has since been constantly in practice.

THE

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Clinical Lecture.

FRACTURE OF THE FEMUR NEAR THE KNEE-JOINT, ILLUSTRATED BY CASES.

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When a bone is broken near a joint, the surgeon may meet with two difficulties: one of diagnosis, and the other of treatment. The difficulty of *diagnosis* is due to several facts: 1. The new point of motion, if there is one, is so near the joint that it may be mistaken for that of the joint itself. 2. There may be impaction of the shaft of the bone into the cancellous tissue, so that there is no new point of motion. 3. There may be a firm blood-clot on the broken surface of bone, so as to prevent the finding of crepitus. 4. There may be great swelling of the soft parts, obscuring the signs and symptoms of fracture. 5. The fracture may be incomplete, when there is neither crepitus nor a new point of motion. 6. There may have been a previous injury, whose results may be mistaken for the effects of the one that has recently taken place. The difficulty of *treatment* is also due to several facts: 1. When the end of a bone is broken, the neuro-muscular apparatus of the adjacent joint is irritated and disturbed, and the muscles that span the articulation contract with much force and persistency. These muscles tend to obstruct and prevent the reduction of the fragments of bone. And, when the fragments are reduced, they are very apt to be displaced again by the contraction of the irritated muscles. 2. I have often had opportunity to observe that a firm and tough blood-clot forms on the broken surface of cancellous bone; and I have many times noted the fact that this blood-clot prevents the satisfactory reduction of the bony fragments. I am reasonably certain that the organization of new bone does not either readily or frequently take the place of the clot that forms on the broken surface of cancellous bone. If this is so, we have one of the reasons why fibrous union occurs from time to time in the vicinity of joints. 3. The swelling of the soft parts will interfere with the hand of the surgeon reaching the bony fragments, so as to be in the way of an effort to reduce them. Even if the bony fragments could be reduced, the retentive appliances must for the most part fail to keep them in place, and, by the time the swelling is gone, the reduction of the fragments may have become impossible. 4. Anyone who has had much experience with fragments of bone will know that it is at times very difficult to reduce them from their new position to the one they came from. And this must be so, because it has required much violence to break them off and displace them, and because they are caught under strong bands of fascia, as well as resisting tendons, and also because they are under new lines of traction by the articular ligaments. In addition to these things, when there is comminution of bone, some of the fragments are beyond the reach of the surgeon's hand, and cannot be reduced; and, if reduction is possible, there is no way by which the fragments can be kept in place. 5. When the end of a bone is broken so that the lines of fracture extend into the joint, there will

be an increased quantity of synovia produced on account of the irritation. The consequence of this will be, that the synovia will get between the bony fragments and interfere with the formation of new bone. 6. Impaction of the shaft of a bone into the cancellous tissue of the end, such as the condyles of the femur, will certainly not interfere with treatment, if it is not disturbed by the surgeon. To break up an impaction may augment the displacements of the bony fragments, so that the deformity may be greater, and so that the disability may be increased in a marked degree.

That the facts and conclusions above stated have important relations to fractures of the lower end of the femur may be known from the following cases:

Case I.—On the morning of July 4, 1874, Mr. H——, about seventy-five years of age, had been drinking. He fell down the front steps of his house, and broke the lower end of his left femur. I saw him on the same day, and found a compound comminuted fracture. The fracture extended into the knee-joint, the condyles being split; the line of separation of the shaft was from below and in front, upward and backward—quite obliquely; the opening in the soft parts was large enough to admit two fingers, and had projecting out of it the sharp pointed end of the upper fragment, which was just above and in front of the patella. The lower fragments were displaced backward and upward; and the condyloid end of the thigh was considerably wider than that on the right side. This patient was put on a water-bed, and his injured limb was placed on a well-padded double-inclined plane, having a moderate elevation under the knee. Some extension or traction was made on the leg by means of a foot-piece on the splint. The position of moderate flexion and gentle traction reduced the lower end of the upper fragment from the wound, and restored the normal form of the knee to a considerable extent. A piece of soft clean cotton-wool was applied over the wound, and kept in place by means of a roller bandage. This piece of cotton-wool came off after about four weeks, leaving the wound well healed. In about eight weeks, this patient began to get up on crutches, and eventually had a very useful limb. There was considerable deformity about the knee. The motions of the leg were not extensive. It could be flexed nearly to a right angle with the thigh, while the extension was not so perfect as before the injury. It may be remarked that the double-inclined plane was so padded as to bring but very slight pressure on the popliteal space. Passive motion to a limited extent was made from day to day after one week. It was impossible to reduce the fragments accurately. The two condyloid fragments did not come into close apposition, and the sharp end of the upper fragment dropped partly between them. The union was fibrous. There was, finally, some motion at the seat of fracture; the motion of the knee-joint was impaired, and so the new point of motion seemed to add to the motion of the leg, and thus diminished the disability.

In this case, any attempt to put the limb in the straight position caused much pain, as well as marked displacement of the fragments; and traction in this position only augmented the difficulties. And, when the leg was fully extended, the lower end of the upper fragment came out of the wound again. But, when the leg was flexed, so as to make an angle with the thigh less than about 140 degrees, the pain became very severe.

Case II.—E. P., a clerk, sixty-one years of age, October 24, 1886, as he was walking, fell on his right knee, and was conveyed to the College Hospital, where I saw him, and found about two inches of the condyloid end of the right femur broken off nearly in a transverse direction. The lower fragment was displaced somewhat backward and inward. There was but slight swelling; the pain was quite severe. Traction on the foot, so as to extend the leg, caused pain, increased the deformity, and prevented reduction of the fragments. Flexion of the leg toward a right angle with the thigh tilted the lower fragment backward, made the lower end of the upper fragment prominent outward and forward, and reduction could not be accomplished. I constructed a double-inclined plane of wire-cloth. The angle of meeting of the two planes was about 155 degrees. The planes were well padded in such a way as to leave the popliteal space free from much pressure. The limb was laid on this splint. The pain was greatly relieved, and the fragments could be reduced, but would become displaced again on removal of the pressure made by the hands of the surgeon. A traction-weight of about four pounds was applied, and, when two angular side-splints were adjusted to the sides of the knee, so as to embrace the thigh, the knee, and the upper part of the leg, the fragments were kept well in place. This patient was discharged on the eighth of March, 1887, having good union

of the fragments. There was some deformity; there was considerable impairment of motion of the knee. After a year the patient could walk with a slight limp, but he still carried a cane. Considerable disability in his case will be permanent, though he has a useful limb.

Case III.—R. M., a laborer, sixty-four years of age, November 11, 1886, was going along the sidewalk and fell on his right knee. He was brought to the College Hospital, where I saw him soon after the accident. I found the right femur broken nearly two inches above the knee-joint. The line of fracture was quite transverse in an antero-posterior direction, and oblique from the outside downward and inward. The lower end of the upper fragment was displaced inward and forward. The lower fragment was displaced outward and upward, and tilted somewhat backward. The leg and lower fragment were rotated outward a few degrees, and there was some inward angular displacement. In moving the limb the patient suffered much pain. A traction-weight of six pounds was applied to the leg. A low double-inclined plane was put under the limb after it had been padded, so as to support the leg and thigh and prevent pressure on the popliteal space. Angular lateral splints were applied, so as to obviate, as far as possible, the lateral displacements of the fragments. Then the patient was quite free from pain. During the treatment of this case, it required constant attention to prevent the fragments from getting out of place. From time to time the fragments did get out of place and had to be reduced. It was four or five weeks before repair began to take place between the fragments, and, when the fragments were finally united, the union was for the most part fibrous, permitting some motion at the seat of fracture. This patient was discharged on the eleventh of February, 1887, with the knee-joint having about one-half its normal extent of motion. He walked with a cane and limped. The injured knee bent inward considerably more than the other.

Case IV.—A young sailor, about eighteen years of age, fell from a ship's rigging some twenty-five feet, and struck the deck with his left knee, the leg being semiflexed, and was treated by his captain, who pulled on the limb, for the purpose of "setting the bone" and removing the deformity. At the end of five weeks this patient was brought to the College Hospital, where I saw him. This was about the middle of December, 1886. I then made the following observations: The swelling of the soft parts had subsided; the motions of the leg had been impaired about one-half; the condyloid end of the left femur, as measured by the calipers, was about three-fourths of an inch greater in width than that of the right; the entire condyloid structure had been enlarged; the left femur was about an inch shorter than the right, according to careful measurement; the two legs were of equal length, and there was no mobility in the continuity of the injured femur. The best opinion I could form in regard to this case was that the lower end of the shaft, or diaphysis, of the left femur had been driven into the condyloid tissue, or the epiphysis, in such a manner as to expand it laterally, without complete separation of the parts. I was reasonably certain that there had been an impacted fracture. And it was fortunate, when the captain pulled on the leg, that he did not break up this impaction. If this accident had happened, there certainly would have been greater disability. This patient could walk with crutches, when he came to the hospital. He made some improvement, and left the hospital in two or three weeks.

Case V.—I saw Mr. L——, about sixty-five years of age, with Dr. Dodge, his attending surgeon. The patient had fallen down three or four steps, and struck on his right knee. The injury was very painful, and was accompanied by complete disability, in so far as walking was concerned. The flexion of the leg was impaired nearly one-half. We made a careful measurement of the transverse diameter of the condyles on both sides, and found that of the right about three-eighths of an inch greater than that of the left. In so far as the upper end of the tibia was concerned, the condyles of the right femur were more prominent than those of the left, as could be easily made out by feeling. To extend the leg completely increased the pain. The more the leg was flexed beyond a certain angle, the more he complained. When the leg and thigh met at an angle of about 165 degrees he appeared to suffer the least. Our conclusion was that the condyles had split vertically, so as not to be entirely separated from the femoral shaft. There had been an incomplete fracture of the condyloid end of the right femur. It would be impossible to reduce the fragments; traction would not be required; rest and an easy position of the limb were indicated. A double-inclined plane, having an adjustable angle, was padded so as to give only slight pressure on the popliteal space, and put under

the injured limb. This patient was up on crutches in about eight weeks, and, at the end of six months, could walk on a level nearly as well as ever. There was some enlargement of the lower end of the right femur, and the motions of the right leg were not as extensive as they were before the injury.

Case VI.—P. G., a laborer, forty-seven years of age, October 27, 1887, was run over by a loaded coal-cart, and brought to the College Hospital by the ambulance. On examination, I found he had a compound comminuted fracture of the condyloid end of the left femur, complicated by a severe contused wound of the leg below the knee. It is probable that the wheel of the cart went over his limb. The leg was rotated outward, and the condyloid fragments were displaced backward and upward, so that the limb was shortened about two inches. The knee was enlarged by the separation of the fragments, as well as by the swelling of the soft parts. The muscles on the thigh were very irritable, and contracted with much force, when the injured parts were examined. This caused much pain. An attempt to straighten the limb augmented the muscular spasm, and caused the lower end of the upper fragment to be carried forward in a marked degree. The wound was large enough to admit two or three fingers, but did not go directly down to the seat of fracture. The limb was put on a well-padded double-inclined plane, having an angle of about 145 degrees. The popliteal space was left as free from pressure as possible, so as to prevent injurious pressure to the vessels and nerve, as well as the bruised and broken structures. Two angular splints were applied—one on the outside and the other on the inside of the limb—embracing the knee and the seat of fracture; and a traction-weight of six pounds was applied to the leg. Then the reduced fragments were kept in good place, the muscles were quieted, and the pain ceased. In the meantime the wound had been made aseptic, and covered with an antiseptic pad. This case required frequent dressing, and from time to time the fragments got out of place and had to be carefully reduced. At the end of three months this patient had so far recovered that he could walk with a cane, and was discharged from the hospital, having a limb that had shortened an inch and a half, with the motions of the knee more than one-half impaired, with considerable enlargement of the condyles, and with more or less ligamentous union of the fragments of bone.

Case VII.—D. G., a boy, four and a half years of age, May 5, 1886, as he was walking along the sidewalk, his right leg went under him and he fell on his right side. He was seen by a surgeon, who said his leg was out of place, and who reduced it. On the following day I saw this boy with Dr. Stuart, the family physician, and we found the right femur broken near the middle and a diastasis of the lower epiphysis. Only the fracture at the lower end of the femur invites our attention now—for a diastasis is really a fracture. It is easy to see how the doctor could mistake the diastasis for a dislocation and make the reduction, but it is not so easy to understand how he overlooked the fracture of the shaft of the femur. We had no difficulty in reducing the fragments; it may be remarked that the pain was greater at the seat of the diastasis than it was at that of the fracture. The condyloid fragment inclined to go backward and upward, but was kept in place by means of a double-inclined plane of moderate height, aided by a traction-weight of about six pounds. Coaptation splints were applied, so as to embrace the three fragments, as well as the leg and the knee. This patient made a good recovery, having slight deformity and but very little disability.

Case VIII.—A laborer, fifty-seven years of age, fell on his right knee, October 24, 1887, and was at once brought to the College Hospital. On examination, I found his right leg abducted from five to ten degrees more than the left. There was slight swelling of the knee. The pain was severe. Lateral motion of the leg showed a new line of motion upward and outward through the external condyle, and the fragment could be felt moving up and down, and out and in, accompanied by distinct crepitus. The transverse condyloid diameter was three-eighths of an inch greater on the right than on the left side. It was impossible to flex the leg beyond a right angle with the thigh. The internal angular deformity was recent. In fact, the line of separation between the condyloid fragment and the rest of the bone could be readily traced with the finger. The injured limb of this patient was laid on a properly constructed and well-padded double-inclined plane, and an angular splint was applied to the outside—no traction-weight being used. The reduction of the fragment was good, and the patient was relieved from pain—so much so, that he came to the conclusion he was not seriously injured. I regret to say that the friends removed this patient from

the hospital at the end of four days, and that I have not been able to see him since.

The practical question in regard to the treatment of these cases may be stated somewhat as follows: When the condyloid end of the femur is broken more or less extensively, a moderate flexion of the leg on the thigh generally gives much relief from pain, enables the surgeon to make the best reduction of the bony fragments, and finally results in the least deformity and disability of the limb. And this proposition, which seems to be illustrated by the above noted cases, that have been taken from our note-book, may be reasonably well explained by the subjoined facts, relating to points of structure and function:

1. There are some points of importance touching the moderate flexion of the leg on the thigh. In the first place, when the leg is completely extended, the quadriceps extensor is fully relaxed, and the ham-string muscles become tense, as well as the gastrocnemius; the gastrocnemius pulls and tilts the condyloid fragments downward and backward, and the ham-string muscles pull the leg upward, and so augment the longitudinal displacement. In the second place, forcible flexion of the leg on the thigh makes the quadriceps extensor tense, so that it crowds the lower fragment upward and backward, making it a fulcrum, whose lower end will be forced forward and upward. Of course, the ham-string muscles will be relaxed, but that will leave the injured parts mostly in the power and under the influence of the irritated and contracting quadriceps extensor. Now, in the third place, it will be seen that moderate flexion of the leg on the thigh will put the flexors and extensors of the leg in the most desirable condition of antagonism, so that each set of muscles will act with a small degree of force, and then they will not greatly obstruct the reasonable efforts of the surgeon to reduce and keep the fragments in place.

2. The double-inclined plane will enable the surgeon to carry out the indications of treatment implied and contained in the facts of the above explanation. It is important, however, that the limb should rest on the pads under the leg and under the thigh. This point requires the especial care of the surgeon. The popliteal space may not be entirely free from pressure, but great care must be taken to keep this pressure always at a minimum. In fact, the surgeon ought to examine the condition of the popliteal space from day to day, and see that it is all right. A little soft cotton-wool will generally give gentle and elastic support to the popliteal space. One thing more in this place: The leg rests on the lower inclined plane. The body of the patient tends to sink into the bed. There is therefore traction on the upper femoral fragment. This takes place as the thigh moves upward on the upper inclined plane. But the leg rests on the lower inclined plane, which resists upward movement. This holds the lower or condyloid fragment downward. And the effect of these mechanical relations is in the direction of the reduction of the fragments of the bone, without undue pressure of the soft parts over or under the seat of fracture. If the lower inclined plane is properly padded, the upper part of the leg, as it rests on the pad, will sustain safely for a long time the pressure caused by this upward traction of the body on the thigh. This certainly agrees with my experience and observation. In some cases the application of this principle alone is competent and sufficient for proper treatment.

3. The reasons for the use of the traction-weight may not be so clear, but yet let us make the following explanation: A traction-weight of four pounds applied to the leg, as it rests on the lower inclined plane, would, in accordance with mechanical law, have its pull decomposed; in fact, there would be two pulls—one in the direction of the axis of the thigh, and the other at a right angle to this direction. The amount of the right-angled and backward pull would depend on the size of the angle at which the leg meets the thigh. After a careful estimate, drawn from actual measurements, I have found that about one-fourth of the traction-weight pulls backward at a right angle with the long axis of the femoral shaft, and that the remaining three-fourths of this weight pulls in a direction from the hip to the knee. On this supposition, we have three pounds of traction operating to keep up the removal of the longitudinal displacement of the condyloid fragment; and then there is one pound of backward pull, operating to cause angular displacement of condyloid fragment backward. On first view, this backward pull is objectionable; but yet it is not very great, and alone could not produce any marked displacement and deformity. In fact, it will be seen that it will be mostly employed in tilting the lower end of the condyloid fragment backward; and this will truly be advantageous, since it will tend to counteract the usual backward and downward displacement of the upper end of the condyloid

fragment. Hence, in any way we may view the traction-weight, as we have recommended its use, its effects must be, in the main, practically good and desirable.

The result in a case of fracture of the condyloid end of the femur, both on theoretical and practical grounds, which are dependent on structure and function, may be stated in the following way: There will be more or less deformity caused by displacements and the products of repair. The products of repair will be found between and about the fragments, as well as in the joint itself; and there will be impairment of function, whose extent will depend on the enlargement of the injured condyles, the inflammatory changes in the ligaments, and the adhesions that form in and about the knee-joint. In the majority of cases, there will be considerable disability of the limb, for the motions of the knee-joint will be limited and locomotion will be impaired. There can be no general standard of disability, and it will have to be estimated and rated in each case, and the only question that would be difficult would arise in regard to treatment.

COMMUNICATIONS.

TREATMENT OF PERITONITIS WITH PILOCARPINE.

BY JAMES Y. SHEARER, A.M., M.D.,
SINKING SPRING, PA.

I have read very little of interest on this subject—peritonitis—for many years. The only information we have thus far been favored with is from our authors who, as a general rule, go over the old routine of practice Peritonitis is looked upon as a dangerous, and even fatal, disease. Every physician who meets such a case is always in doubt as to the final result. I have seen cases of peritonitis in which the patients were treated with sulphate of morphia and opium in very large doses, and yet were gradually sinking all the time, and finally died very suddenly. Calomel and opium were at one time considered to be the great remedies, but experience has since shown that the opium was doing the work; since then, opium has been very highly recommended in this disease, and yet from experience we learn that a large percentage of its victims die. Dr. Flint, speaking of the gradual change in the treatment of this disease, says on page 510 in his "Practice of Medicine": "The change consists, first, in the disuse of blood-letting and cathartics, and, second, in relying mainly on the use of opium." Dr. Watson, in his lectures on the Principles and Practice of Physic, forty-four years ago, recommended blood-letting, calomel, and opium in strong terms, and stated that "it is extremely desirable in these cases to obtain, as speedily as possible, the specific influence of mercury upon the system, by calomel and opium." Years ago, writers on this subject recommended both mercury and opium. Gradually the mercury was dropped, and now opium is looked upon as the principal agent in the treatment of this dreadful malady. It is within a few years that I resorted to the same remedy, and, am sorry to say, not with too great satisfaction; but at this time I am pleased to be able to present to the profession a treatment for peritonitis which will not only give satisfaction to some isolated few, but which will, in my opinion, become the recognized remedy for this disease in the near future throughout the civilized world. One year ago I intended to write an article on this subject, but I refrained, as I desired to give it a full, fair, and impartial test before so doing.

In 1885, I changed my treatment of peritonitis, giving, instead of opium, nitrate of pilocarpine From the nature of the drug, and from its action, as results from its use in other cases unmistakably showed, I concluded that pilocarpine would accomplish in peritonitis what nothing else known to the profession would. I accordingly determined to use it.

Case I.—On May 6, 1885, Mrs. J. H., 25 years old, was delivered of a very large child: a face presentation and a very difficult labor. On the day following, I saw her twice. She then already had symptoms of peritonitis. On May 8, I found her very sick. She was weak and had a very high fever, with a pulse of 120. Her abdomen was very much swollen and distended, and very sensitive to the touch. She had great pain. Her urine was scant and high-colored. Her skin was dry, and she had a great thirst for water. She also had vomiting-spells. There was no mistaking the disease I had before me—a genuine case of peritonitis. I ordered the following:

℞. Pilocarpinæ nitratis . . . . . gr. I
Aquæ . . . . . f℥j
Mix.

Of this she took a teaspoonful every four hours in a little water The day following—

May 9—I found her much improved. The first dose checked the vomiting, and after the third dose there was profuse perspiration. I also found an increase of urine, and the patient had more rest.

On May 10, I saw the patient and found a decided improvement. She had no pain, and the swelling of the abdomen was very much reduced. She also had a natural movement of the bowels. I then ordered the medicine to be given every five hours instead of four.

The day following—May 11—she was doing so well that I ordered the medicine to be given every six hours. On May 12, she was entirely out of danger. She took nourishment and was fast recovering. On May 15, I pronounced her well

Case II.—Mrs. S. B., aged twenty-two years, took sick on November 18, 1887, of peritonitis, the result of a fall. I was called to see her November 21, and found her pregnant, having gone about four months. Her abdomen was very much swollen and sensitive She vomited everything that was given to her. Her pulse was 130, and she had great dryness of the tongue. She was so weak and swollen that she was obliged to assume a half-lying position. She had great pain in her abdomen. I prescribed for her the following:

℞. Pilocarpinæ nitratis . . . . . gr. i
Aquæ . . . . . f℥j
Mix.

I ordered a teaspoonful every four hours, in a little water.

I saw her again the following morning, November 22, and found her doing much better. She had had no vomiting after taking the first dose of the medicine. Her skin was moist, and she could take a little nourishment. She passed her urine freely. Her pulse was 108.

I saw her November 23, and found her improving. The swelling of her abdomen was fast subsiding. Her pain was less, and the sensitiveness of her abdomen was decreasing. She had a natural movement of the bowels, and took nourishment quite freely. I then ordered the medicine to be taken every six hours.

I saw her again on November 25. She was doing so well that I considered her out of all danger. But she still continued to take the medicine.

On the 28th, I saw her again, when I pronounced her well.

I have since had a number of other cases of peritonitis that I might report at length, but suffice it to say that, by using the same remedy, I had the same happy results. But one case I feel constrained to notice more fully, as the patient was a male, and the circumstances possibly more striking.

The patient was a man about fifty years old, who had a very severe fall on the abdomen, in his barn. He had called in another physician in my absence, who had treated him several days before I was called in. When I first saw him, he had great abdominal tenderness, vomiting-spells, dry tongue, great thirst, and dry skin—a clear case of peritonitis. I at once administered pilocarpine nitrate, as hereinbefore stated, and the medicine acted so effectively and charmingly that I felt it my duty to make a report of it to the profession Since using this remedy, I have not lost a single case of peritonitis. Practitioners of medicine too frequently make mistakes in following practices and book-recommendations long exploded, and fashioned after mistaken sentiment and error. Too little attention is paid to therapeutics. Medicines are poured into the patient without regard to their actions. In this way no profit can be derived from experience. To fulfill the duties of a practitioner of medicine requires the careful observation of individual cases in all their bearings, a thorough examination of all circumstances, causes, and results, and that this information be so digested as to enable him to have the benefit of it in subsequent cases of similar character. This I call experience. I have followed this course for over a quarter of a century, and the satisfaction it yields is inexpressible. In this way I came to use pilocarpine in peritonitis. This treatment did not come to me recommended by any author. I have used it of my own accord, believing that from the nature of the medicine I could accomplish with it what I could not do with any other agent. Thus far it has uniformly given me such excellent results that I have no fear in recommending it to the profession, and bespeaking for it the highest merits in the treatment of peritonitis.

—The *Weekly Abstract of Sanitary Reports* states that the American brig "Teneriffe," from Havana, arrived July 22, at the Delaware Breakwater Quarantine Station, with two cases of yellow fever on board. One man died during the passage. The sick have been admitted to hospital, and the vessel placed in quarantine. Since the admission of the first two cases, the captain, who had remained on board, was taken sick, and at once removed to hospital.

THE TREATMENT OF POTT'S DISEASE.[1]

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The mechanical treatment of Pott's disease of the spine has practically not advanced since Sayre first applied the plaster jacket and at the same time connected his name almost as inseparably with this disease as the immortal Pott has done.

One question of great practical importance in this treatment is, shall this support be continuous, or may we trust to position during the night, when the jacket becomes most wearisome to the sufferer? To borrow a comparison from the younger Sayre, must the parts be kept as constantly and as carefully in splints as a fractured bone? From clinical experience and observation, I think not, if an exception is made of very acute and progressive cases. If a properly fitted appliance is worn during the day, from just previous to arising to immediately after retiring, then the weight of the body is at no time transmitted through the vertebral column, and the diseased part is relieved from pressure. The patient that sleeps on a hard mattress, without a pillow or with but a very small one, gains as much from this position during the night as from his mechanical support throughout the day. If the apparatus is to be taken off at night, the plaster-of-Paris jacket can not be used; it must be substituted by a movable corset of steel, leather, felt, or some other material. Personally I am very well satisfied with the leather jacket. It is cheap, it can be made by the surgeon himself without the aid of the instrument-maker, or by calling on the latter to apply the finishing-touches only, after he has adapted it to his patient; it is light, durable, cleanly, well ventilated, and, above all, accomplishes its purpose. A leather corset, laced on tightly each morning, will be found to fit more accurately than a plaster-of-Paris jacket. The latter is very apt to expand slightly while setting, and so from the first may not be an exact fit. The laced corset can also adapt itself to changes in the body due to variations in weight.

The leather jacket is so simple that a person without the slightest idea of mechanical principles can apply it perfectly. This is not true of steel supports. To obtain the best results with these, they should be under the control of a person of some intelligence; but, outside of hospitals, we have to rely upon the family, and only too often they are not capable of understanding why such minute directions must be obeyed, or of following them if they would.

This melancholy picture is illustrated by the history of Jim F. I first saw him in October, 1886. The symptoms of the disease were very marked; rigidity of the spine, local pain, deformity, unwillingness to walk, and the characteristic method of picking up articles from the floor.

The hump was about the middorsal region. There was no history of a trauma. As the mother could not be trusted to make the proper use of a movable corset, Sayre's jacket was at once applied. After this the symptoms were not so severe, but the child was feverish and restless. At the end of a month the parents, who could not see their child tortured in that manner, insisted upon taking off the jacket.

But the child clamored for it, now that he had learned its value, and, out of sympathy for him, I once more took charge of the case and fitted a leather corset. The result justified my fears. The patient grew worse from week to week on account of bad nursing and neglect. He died from the heat in the summer of 1887, during my absence from the city.

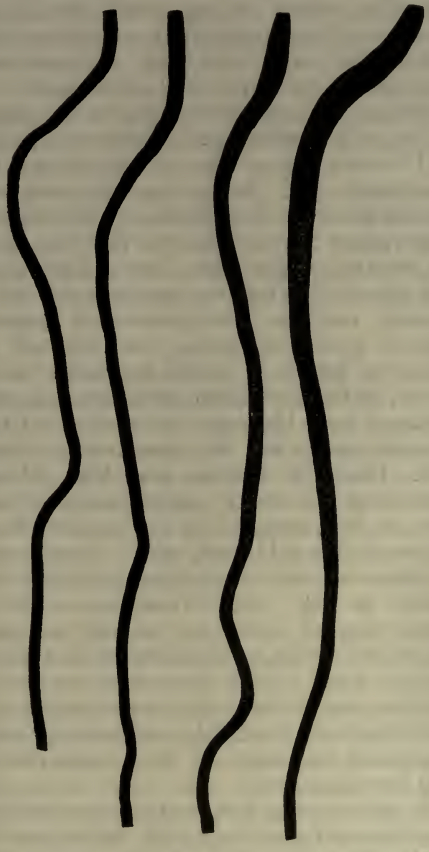
In a hospital the child might have been saved, but such care as he received from his mother would have rendered any treatment nugatory. In such families it should always be Sayre's jacket, and never a movable one.

With the intelligent assistance of the parents, it is another matter altogether. Geo. J., whose present condition is shown by the diagram Fig. 1, was just recovering from measles when his parents noticed something wrong. When I first saw him in March, 1887, quite a prominent hump was situated just below the seventh dorsal vertebra. He was then three and a half years old. He was at once given a leather jacket. Since that time he has had scarcely a bad symptom, and, a few weeks ago, walked two miles without a complaint. The vertebræ seem to be solidified, but the child will not give up the corset. It is difficult to decide when the proper time has come to withdraw supports. Alexander says that no spine can be considered cured until a post-mortem has been made, which sounds as though he would condemn these unfortunates to the wear-

[1] Paper read before the Ohio State Medical Society, June 15, 1888.

ing of braces and supports all their lives. While the disease is very chronic, as is caries of any of the spongy bones, yet in some cases its advance finally ceases, and after the lapse of time nothing remains as evidence of its former presence except the destruction that it has wrought. This patient has had no fever, no cough, has not lost flesh, there is apparent anchylosis, and yet he refuses to go without his support.

FIGS. 1, 2, 3, 4.



NOTE.—These figures are lead wire tracings of the spinal column and part of the skull. They all end at the sacrum. Figs. 1 and 2 pass above the occipital protuberance, but Figs. 3 and 4 do not.

The patients were standing erect with no support.

This difficulty is, however, not always met with. Harry D., a boy of about the same age, a tracing of whose back is shown in Fig. 2, wore his jacket for fifteen months; he had had symptoms for nine months before I saw him, but not the slightest difficulty was experienced in taking away his support when the time came. His case is of interest because a second kyphosis developed in the lumbar region. There was no history of a trauma. He is now suffering with general tuberculosis.

In Fred H.'s case, however, Fig. 3, a trauma seems to have been the starting-point. He was hurt in the back during an encounter with a goat, and from that time his symptoms dated. Before many weeks passed, the surgeon who was called applied Sayre's jacket. The family compelled him to remove it in a few weeks, and he gave up the case. About a year after the accident I was called and made a leather jacket for him. The hump was at the junction of the dorsal and lumbar vertebræ. He soon began to run about and play, which he had not done for a long time. He wore the jacket fourteen months, when it was taken off. The hump is more prominent than it was, but this is due in great measure to the sharp compensatory curves in its immediate neighborhood.

The most interesting case of all is that of Gus. D., Fig. 4, now 14 years old. When he was 11 years old, he began to complain of obscure pains, would not play with other boys, and slept badly. An examination revealed rigidity of the spine and a contracted and painful condition of the right psoas muscle. The boy leaned to that side when he was obliged to move around, and held the thigh fixed in a semiflexed position at all times. There was a fluctuating swelling, as large as a walnut, just above the crest of the ilium, at the outer edge of the quadratus lumborum muscle. This was aspirated and a small quantity of thick pus drawn off. There was tenderness to pressure over the lower dorsal vertebræ, and, while the jacket was being made, the spine of the eleventh dorsal vertebra began to grow prominent. The jacket was applied and rest ordered, while extension was made by means of the weight and pulley to the right leg. This last was discontinued after three weeks, as the irritability and sensibility of the psoas had disappeared. The jacket was worn for six months, when it was removed, and to-day a slightly exaggerated lumbar curve is all that can be seen. The boy is strong and active.

Many surgeons condemn interference with abscesses connected with Pott's disease; but whether this objection is founded upon improper methods of operating and after-treatment, or upon good and sufficient surgical principles, is very doubtful. It is argued that these abscesses frequently undergo spontaneous absorption; but, with Mr. Edmund Owen and others, I think that this probability is very small, and that

a statistical study of a large number of carefully observed cases would probably alter the opinion of the profession upon this point. Mr. Owen says: "In my own experience, this happy contingency (spontaneous absorption) has been so rare that I do not regard it as within the range of practical therapeutics."

Disastrous results have followed puncture in the neighborhood of Poupart's ligament, and will continue to do so, because the opening is made at the end of a long sinuous tract, with pouches in which the retention and fermentation of the discharges must occur, and which the most careful disinfection and drainage from the groin alone cannot reach.

It has been proposed, in order to overcome these difficulties and to rescue the patient from the dangers of a tedious and extensive suppuration, to make a counter-opening at the other end of the abscess, and, by free irrigation throughout its length, hasten its obliteration. A number of surgeons have followed this practice, and their success has certainly been most gratifying. It is unnecessary to recite the cases to this society, but the names of such surgeons as König, Wood, Israel, Treves, Dollinger, and others must certainly command attention.

This was the first step in advance from the expectant plan, and opened the way for the second one, the local treatment of the diseased vertebræ themselves. In 1882, Israel opened a large abscess in the lumbar region. Exploring with his finger, he felt that the twelfth rib was carious to a considerable extent, which part he at once resected. The finger now passed on readily to the body of the twelfth dorsal vertebra, in which a large sequestrum was found and also removed. In loosening it, the membranes of the cord were exposed and a collection of pus evacuated that had been compressing the cord. The sequestrum consisted of at least half of the body of the vertebra. From that time, the patient was relieved of pain. He died with empyema some weeks later, when the abscess-cavity was found much shrunken, while healthy granulations occupied the seat of the sequestrum.

In 1884, Treves reported to the Royal Medical and Chirurgical Society, London, three cases in which he had examined, through a lumbar incision, the bodies of the lowest dorsal and the lumbar vertebræ. In one case he removed a large sequestrum one inch by half an inch, and the patient's recovery was rapid and complete. In another he removed simply necrotic sand and detritus, but had the satisfaction, upon making an investigation after death from general tuberculosis some months later, of finding the previously denuded bone covered and the abscess nearly closed. A third case was simply exploratory at the seat of an old lumbar kyphosis, where, however, nothing was found. The patient recovered.

This is certainly scientific surgery. It is but the same practice that has been so successful in analogous conditions in other situations, where no one would now for a moment call its propriety into question and where the expectant plan of treatment amounts almost to criminal carelessness.

We are told that the destruction of bone in this situation is of such an essentially slow and chronic nature that it should not be interfered with. But is this statement not an argument for interference? Of whatsoever variety the caries in the vertebræ may be, whether due to a localized tuberculosis, the effect of a trauma, or the result of a pyæmic embolus, the process of healing can be greatly shortened, or induced in cases in which it would otherwise never occur, by the application of the sharp spoon, followed by a thorough disinfection of the diseased cavity and the surrounding tissues. Drs. Thos. G. Morton and Wm. Hunt, editors of the article on Orthopedic Surgery in the Annual of the Universal Medical Sciences, just published, say: "Pott's idea of treatment was based upon attacking the disease *in situ*. Who knows but what in these days of antiseptic surgery we may practically return to his methods in a much bolder way? Such treatment would be positive and based upon sound pathology, while the most that can be said of the present method of treatment, in all its varieties, is that it is expectant."

In order to reach the bodies of the lumbar vertebræ and the last dorsal, an incision is made at the outer edge of the erector spinæ mass. Some of the fibres of the latissimus dorsi muscle must be divided, and also the superficial layer of the lumbar fascia. This opens the fascial sheath around the erector spinæ mass, which can then be readily retracted toward the median line, while the posterior part of the sheath, the middle layer of the lumbar fascia, is incised near the tips of the transverse processes of the vertebræ. If there is a large abscess, it will now present; if not, a short dissection with the scalpel-handle along the transverse process leads to the body of the vertebra, which can be examined with the finger.

The results of the few operations that have been made are the best testimonials of its worth.

I have long thought that this operation should not be limited to the lower end of the column, where its advocates confine it. Recently I have made quite a number of dissections in order to see whether the bodies of the dorsal vertebræ are not accessible to the surgeon by a short and safe dissection. After finishing my investigations, I found that Dr. Thos. Laffan had suggested to the Royal Academy of Medicine of Ireland, at its meeting last January, that this operation should be extended to all of the dorsal vertebræ, and he deserves the credit of being the first to propose this extensive application of local surgical treatment.

My conclusions from the dissections that I have made on both adult and infant subjects are, that the bodies of all the vertebræ are accessible to the surgeon, and that there is but little danger of opening the pleural cavity.

The best method is to make an incision about three inches long just external to the transverse processes of the vertebræ, down to the ribs. In the dorsal region, the erector spinæ mass cannot be retracted as readily as in the lumbar region, as the serrations of the different muscles inserted into the ribs render this impossible. Therefore an incision through the muscle in the direction of its fibres is better than retracting. Subperiosteal resection of from half to three-quarters of an inch of the rib, in the centre of the incision, is the second step. One end of the resected piece should be as near to the articulation of the rib with the transverse process as possible. The third step is the dissection of the parietal pleural and subpleural tissue from the head of the rib and the side of the vertebra or vertebræ to be examined. This has always been easily done with a blunt instrument and invariably without opening the pleural cavity. In the child, on several subjects, I could readily pass the tip of my finger to the opposite side of the vertebra, and could examine as many as four vertebræ from one opening.

It is readily understood that, when an abscess-cavity exists, this subpleural dissection will be very short, and the danger of opening the pleural cavity be reduced to a minimum, by the fact that it will be found to have been obliterated by adhesive inflammation in the vast majority of cases.

Having exposed the seat of the disease, the bone can be scraped and gouged with small sharp spoons, set at different angles to their handles; sequestra can be extracted, which, by pressure upon the cord or by the retention of the products of suppuration, may be the cause of paraplegia; the pyogenetic membrane of the abscess-cavity can be destroyed and removed; the cavity can be thoroughly disinfected, and the recuperative power of the patient given an opportunity to assert itself.

This operation should undoubtedly be restricted to cases in which all the symptoms point to an abscess. Whether, when its value has been determined, it may or may not become the routine practice in every case as soon as the diagnosis has been made, cannot now be predicted. Should this future be in store for it, a shortening of the time required by the present expectant plan of treatment to weeks, instead of months or years, a lessening of the deformities due to great loss of bone, and a great reduction of the danger of constitutional infection in tubercular cases are among the brilliant possibilities of the local treatment of Pott's disease.

UNUSUAL CASE OF FECAL OBSTRUCTION.

NOTES FROM THE PRACTICE OF DR. J. M. KEATING.

In 1880, A B., æt. 20, an unmarried woman, came under Dr. Keating's care. The patient had been a chronic invalid for several years, having gradually grown worse despite all treatment. At the first visit, the patient was pulseless and unconscious—though she could be occasionally aroused—with cold clammy skin and marked emaciation. A history of gradual emaciation, constant vomiting, excessive pain radiating from the epigastrium to the back, and vomiting of blood, was elucidated. The abdomen was enormously enlarged. Under hypodermic injection of digitalis and whiskey, the patient revived somewhat. An examination was then possible, which revealed a mass of solid matter, simulating an enlarged spleen, extending from the splenic region to the left iliac fossa, and as great an enlargement on the other side, due to excessive tympany. An examination of the bowel revealed a stricture of the rectum about four inches from the outlet, so small as to make it impossible to introduce the point of the finger. The uterus was retroflexed and retroverted, bound down by adhesion, and, in fact, pressing so forcibly down upon the

bowel as at once to give the impression that it was this and an inflammatory mass, with possibly a displaced ovary, that had been the cause of the stricture.

After careful manipulation, a long male catheter was finally passed through the stricture and into the bowel, through which some warm water was injected and very putrid material was drawn off. Dr. D. Hayes Agnew now saw the case in consultation, dilated the stricture with bougies, and drew off a large amount of the most putrid matter, which diminished the tumor in the region of the descending colon.

It was afterward learned that the patient had suffered intense irritation by the administration of croton oil some years before the patient came under Dr. Keating's care.

After the dilatation, enemata for a time kept the bowels open; but in a short time all the symptoms returned, with scanty evacuations consisting of mucus stained with feces. She retained no food whatever for days at a time, and was supported almost entirely by nutritious enemata. Menstruation was irregular, remaining absent for periods of four or five months, and then occurring once or twice. The uterus was straightened, and the adhesions softened or removed by means of tampons and mechanical treatment, but, all her other symptoms continuing in their severest form, Dr. Agnew was again called in consultation, January, 1883, and forcible dilatation of the stricture was practiced. Large quantities of mucus were passed, but no feces. Food was retained by the stomach for a short time. She did not now vomit any blood, but all the other symptoms again returned.

It was now determined to attempt gradual dilatation of the stricture; this, however, was attended with only partial success, as the feces were passed with difficulty and presented evidences of much compression; however, she was able to retain small quantities of food; but violent headaches developed, with excessive and uncontrollable vomiting, sometimes of fecal matter. This gave some relief, especially to the tympany, which was becoming an alarming symptom.

On February 24, 1887, the operation of colotomy was performed by Dr. John H. Packard,[1] the then consultant, but the colon was not opened. On March 17, 1887, the cæcum was opened by Dr. Packard, who stitched the edges of the opening to those of the wound in the skin. The patient was relieved by this procedure for a time, but great difficulty arose in keeping the opening patulous, it finally closing down to almost a pin-point in spite of all efforts to the contrary, Dr. Thomas R. Neilson devoting much time and attention to this matter.

The case has been a very puzzling one all through, and has at various times been examined by the following physicians as consultants or attendants: Drs. D. Hayes Agnew, Theophilus Parvin, Charles B. Nancrede, J. H. Packard, W. A. Edwards, and T. R. Neilson. Finally, on June 5, 1888, Dr. J. M. Keating performed an exploratory laparotomy, assisted by Drs. Nancrede, Neilson, Edwards, Thomas, Bonnaffon, and Mr. Clarke. The patient, as in all the other operations, was first rendered insensible by the administration of nitrous oxide, after which anæsthesia was maintained by sulphuric ether. The uterus was found to be retroverted, and its fundus and posterior wall were roughened by old adhesions, which had been diagnosed by rectal and vaginal examinations and had improved and softened under treatment. The left ovary was congested and lying in the cul-de-sac behind the fundus. The colon, as far as could be ascertained, was normally situated and histologically intact. The rectal stricture was found to be entirely within the calibre of the tube, and not one caused by any growth, pressure, or adhesion without the gut.

The patient did well, recovered nicely from the section, and is now up and about, doing well and gaining strength. The stricture is being dilated. Several days ago she passed some large scyballæ. It is a curious fact that a large injection of warm water remains in the bowel, except a small portion which oozes out of the cæcal opening. The patient apparently absorbs this water. The rectum below the stricture is simply a large sac, completely paralyzed, and feels much like the dead bowel on the post-mortem table.

[1] For account of operation, see Dr. Packard's paper in Trans. Med. Soc. of Penn., vol. xix, 1887, p. 75.

THE GLASS-EATER.—The Philadelphia *Ledger* says that the glass-eater, who used to amuse the visitors to a number of dime museums throughout the country, often had a *pane* in his stomach, but he has now developed a full-fledged inflammation of that organ as a result of his diet. The latter, he explains, was not glass, but a composition of gelatine and soluble silicate, which exactly counterfeited glass and was supposed to be harmless. That it was not entirely so is shown by his present sickness.

Society Reports.

AMERICAN OPHTHALMOLOGICAL SOCIETY.

TWENTY-FOURTH ANNUAL MEETING, AT NEW LONDON, CONN., JULY 18 AND 19, 1888.

(Specially reported for the Medical and Surgical Reporter.)

First Day, Wednesday, July 18.

The President, Dr. Wm. F. Norris, of Philadelphia, in opening the meeting, referred to the losses of the Society by death during the past year. Dr. H. D. Noyes read a brief memoir of the late Dr. C. R. Agnew, and committees were appointed to prepare similar memorials of Drs. E. G. Loring and Joseph Aub.

The Division of Membranous Opacities of the Vitreous.

Dr. C. S. Bull, of New York, had done this by introducing a needle or narrow cataract-knife through the sclerotic just in front of the equator of the eyeball, and below the insertion of the external or internal recti muscles, usually the former. This was done under antiseptic precautions, and a protective bandage applied for two or three days. The reaction was commonly very slight. He had performed the operation on 17 eyes. None had been left the worse for such interference; 14 had vision improved; in 11 it was doubled or more than doubled. The best results were quite equal to those of very successful cataract extractions. There was usually some immediate improvement, which often went on increasing for days or weeks. In nearly all of these cases there was a history of previous deep inflammation of the eye; but it was important to wait until all inflammatory symptoms had subsided, before attempting such surgical interference.

Dr. W. F. Mittendorf, of New York, thought that vascularity of such a membrane should contra-indicate operation. Vascular membranes often disappear spontaneously, and hemorrhage from divided vessels would be liable to interfere with the result.

Pulsating Exophthalmos, cured by Ligation of the Common Carotid.

Dr. F. Buller, of Montreal, had seen two other cases of this character in which death had occurred from epistaxis, one after ligature of the carotid, the other without any attempt in that direction. In the latter there was found a direct communication between the internal carotid and the nostril, due to fissure of the base of the skull. The special subject of this report was a man aged 20, who had fallen, striking the right side of his head. On regaining consciousness, a loud beating sound was noticed in the head. There was great swelling of the right side of the face, and, when this subsided so that the right eye could be opened, diplopia was noticed. The pupil was dilated, and the eyeball displaced outward five-tenths of an inch, and forward six-tenths of an inch. There was strong pulsation and a loud bruit, which ceased on compressing the carotid. The right common carotid was ligated at its upper portion. The wound was found entirely healed when the dressing was first opened, on the tenth day. The swelling was immediately diminished; bruit and pulsation ceased at once. Vision improved from 20-100 to 20-20. A slight prominence of the eye was the only remaining symptom.

Dr. J. O. Tansley, of New York, and Dr. C. J. Kipp, of Newark, narrated cases of pulsating exophthalmos in which great improvement had occurred while using small doses of potassium iodide.

Dr. S. D. Risley, of Philadelphia, had seen a case in which cessation of pulsation and bruit occurred after three periods of compression of the carotid until faintness was produced.

The Measurement of Astigmatism with the Ophthalmometer.

Dr. S. M. Burnett, of Washington, had measured with the ophthalmometer of Javal the refraction of the healthy cornea in 576 eyes belonging to 301 persons. From the results of these examinations he concludes: That in corneal astigmatism the vertical meridian is, with few exceptions, the most strongly refractive; that many cases of lenticular astigmatism are due to the oblique position of the lens; that the corneal astigmatism expresses in a vast majority of cases the general astigmatism, both as to degree and axis, and therefore this instrument furnishes one of the best means of diagnosticating that anomaly; that astigmatism is not more likely to lead to progressive myopia than any other form of ametropia.

Dr. H. D. Noyes, of New York, confirmed Dr. Burnett's estimate of the instrument. Its findings without atropia, in the immense majority of cases, correspond to the refraction determined under atropia. It sometimes shows that the meridians of greatest

and of least curvature are not perpendicular to one another, so that the astigmatism is not capable of perfect correction. It shows that variations in the pressure of the lids or in the tension of the recti muscles may cause notable variations in the corneal refraction, and sometimes the cornea is so thin that there is a distinct pulsation of the corneal reflex.

Dr. C. Koller, formerly of Vienna, now of New York, could add testimony to the value of the ophthalmometer. He thought the meridians of greatest and least refraction were sometimes not perpendicular because of a very large angle alpha.

Dr. B. A. Randall, of Philadelphia, called attention to the fact that Dr. Burnett's statistics as to the relative frequency of various forms of astigmatism differed radically from statistics obtained from the examination of eyes under a mydriatic.

Progressive Hyperopic Astigmatism.

Dr. J. B. Emerson, of New York, reported a case under observation several years, in which this error of refraction had gradually increased from nothing, until it required to correct it R. + 1-9 cyl. axis 165°, L. + 1-18 cyl. axis 180°.

Instruments.

Dr. E. Jackson, of Philadelphia, exhibited a new form of cataract-knife, in effect a combination of the Graefe and Beer knives. It combined the perfect control of the puncture and counter-puncture of the former, with the smoothness of incision, retention of aqueous, and assistance in fixation of the latter. With it, the incision was commenced as with a Graefe knife, and completed by a single forward thrust, as with the Beer knife.

Dr. J. O. Tansley showed forceps for compressing the lachrymal puncta and preventing the entrance of strong mydriatic solutions that it was sometimes necessary to use in the eye, and which, when absorbed from the lachrymal passages, the nose, or the throat, were liable to cause constitutional symptoms. He also exhibited hollow lachrymal styles and tubes for injecting the lachrymal passages.

Dr. Mittendorf, for injecting the lachrymal passages, attached the perforated canula to a piece of rubber tubing, and not to a syringe.

Dr. S. Theobald exhibited a set of lachrymal probes made of aluminium, which is a light, non-oxidizable, very smooth or slippery metal.

Œdema of the Choroid and Retina.

Dr. E. Jackson reported the case of a young man who suffered a bruise of the eyeball. The ophthalmoscope showed œdema of both choroid and retina, which disappeared as the eye went on to recovery. Water-color sketches, showing the appearances presented, accompanied the report. There was also a myopic astigmatism of 0.75 D., which entirely disappeared in three weeks.

Symptomatic Myopia.

Dr. W. F. Mittendorf called attention to this kind of myopia, and reported cases of its occurrence in connection with commencing cataract, glaucoma, choroiditis, and iritis. In the first it was due to swelling of the lens, in the others it probably was caused by exudation into the vitreous. It was only a symptom, disappearing with the disease causing it.

Dr. J. Green, of St. Louis, had first noticed myopia after iritis in his own case, as the inflammatory symptoms were subsiding. This was twenty years ago, and he had been on the lookout for myopia after iritis ever since. It is not uncommon.

EVENING SESSION

Hysterical Blindness in the Male.

Dr. W. O. Moore, of New York, reported three cases. The first was in a man who had shown various nervous symptoms for about two years. He claimed to have no light-perception in the left eye. It, however, appeared normal; and the placing of a prism, with its base up, before the good eye, caused vertical diplopia. He was assured of a speedy cure by electricity. The Faradac current was applied, and its strength suddenly increased, so as to cause a decided shock. After this he could see some. After a second application he could read 20-50, and, after the third, 20-20.

In the family history of the second case there was some insanity. He had used a mydriatic 18 months before, had become excited over its effects, and began wearing dark glasses, then shades over the eyes, and soon confined himself to a dark room. He was suffering from the effects of this confinement, and claimed to be entirely blind. He was etherized, and the ophthalmoscope showed the eyes to be normal. A free division of the outer canthus was done on each eye. On recovering from the ether, he was told that the cause of his blindness had been discovered and removed. The next day he

could walk about alone, and he quickly recovered full vision.

The third case was in a boy of fifteen, disappointed as to obtaining a prize in school. He soon began to complain of his eyes, and, when seen, gave a history of complete blindness of the right eye for one month. Appearance normal, diplopia with prisms. He was etherized, and the good eye bandaged. On recovering from the ether, he gave convincing proof of his ability to see with the other, and could soon read 20-20 with it. It is a mistake to dismiss patients of this kind with the statement that there is nothing the matter.

Dr. E. Jackson had seen a colored boy of twelve, who claimed to have only light-perception. He was cured by the use of a mydriatic, with a confident prognosis that his sight would return as the effect of the drug passed off.

Dr. S. D. Risley reported a case of photophobia which suddenly developed in a person suffering from aphonia, on being thrown with a person whose eyes were under a mydriatic. The aphonia disappeared as the photophobia appeared.

Tests for Partial Color-Blindness.

Dr. Charles A. Oliver, Philadelphia, read a paper on a description of a series of tests for the detection and determination of sub-normal color-perception (color-blindness), designed for use in railway service.

It is a well-known fact, he said, that many "color-blinds," especially those of medium grades, have the power of differentiation, even by daylight, of the most difficult colors when these are placed at the ordinary metre distance for wool selection, which is employed in the detection and determination of "color-blindness." Dr. Oliver has tried to overcome the dangers that might arise from this power in situations such as railways, marine and naval service, where the safety of lives and the protection of property are often solely dependent upon proper recognition of color at great distances, and frequently through the intervention of more or less translucent media. He seeks to combine two modifications of his method of color-selection by which the candidate is placed in the actual position of after-work and under circumstances exactly similar to those which exist during employment. The method is divided into three parts.

First.—The selection and registry of a definite number of loose wools from 23 pure and confusion-match skeins thrown upon a dead black surface at one metre distance.

Second.—The selection and registry of the same number of similar reflected colors under various intensities of diffuse daylight stimulus, placed at distances requisite for safety.

Third.—The selection and registry of transmitted colors under various intensities of artificial light stimulus, placed at distances requisite for safety.

In addition to the advantages shown to refer to the first test alone, the method has the following additional ones: (1) Much faster in time than any other method; (2) the selection of loose wools at a distance; (3) no necessity for an expert except in doubtful cases; (4) employment of the same character of signal for testing as is used in daily routine; (5) placing the eye during testing at a distance necessary for future safety; (6) bringing the eye during testing directly before the true condition of weather which will be experienced when the man is upon duty; (7) test and match colors all graduated in proportionate sizes.

Embolism of the Central Retinal Artery.

Dr. C. A. Oliver read the report of a case of this affection, ending in complete blindness of the eye affected. Dr. Mittendorf and Dr. Burnett referred to cases they had met with.

Second day, Thursday, July 19.

Double Congenital Absence of the Iris.

Dr. S. Theobald reported a case of double congenital irideremia in a boy eighteen months old. His mother, who brought him because of the red appearance of his pupils, stated that another of her children presented the same appearance. The point of chief interest was that the mother had a coloboma of the iris in each eye, in the right directly upward, and in the left upward and outward.

Dr. D. Webster, of New York, thought upward coloboma must be quite rare; he did not remember to have seen a case in which the deficiency of the iris occurred in that direction.

Dr. B. A. Randall said that there were a few cases on record of so-called coloboma inward and outward, but none extending upward. The case was unique.

Puncture of Detached Retina: Recovery.

Dr. T. Y. Sutphen, of Newark, reported a case. The detachment involved first the right eye, then the left also; and the area of detachment progressively increased until it was almost complete in both eyes. Rest in bed, diaphoretics, etc., had no effect; and, when the detachment had existed about six months, he introduced a needle through the sclerotic under the detached portion and punctured the retina. Considerable subretinal fluid escaped from the right, and very little from the left. The patient remained in bed and faithfully kept quiet for twenty-eight days after the operation. In both eyes the retina became completely replaced, but in the left the separation recurred, and a second operation gave no permanent improvement. In the right the cure seemed permanent; several months had elapsed, and he was now using the eye with vision of 15-20, with a glass correcting his moderate myopia.

Dr. E. Jackson had tried the operation in a detachment of some eighteen months' standing, where other means had failed, No improvement in the function or position of the retina resulted, but the patient had not remained in bed so long or faithfully as Dr. Sutphen's patient.

Dr. E. E. Holt, of Portland, had seen good recoveries under treatment by rest in bed and jaborandi. He had seen no improvement after puncture.

Dr. S. D. Risley had seen recurrence of a detachment from jumping off a moving street-car.

Glioma of the Retina.

Dr. F. P. Capron, of Providence, reported a case in a child of three and a half years. The growth, which protruded greatly from the orbit, was removed, but was recurring in the neighboring glands

Dr. J. F. Noyes, of Detroit, had once recognized the growth in the eyes of a child four years old, and advised enucleation. This was declined, and the child died within a year afterward, from extension into the orbit and neighboring parts.

Dr. W. F. Mittendorf could only recall having seen two cases of glioma; they seemed to be more frequent in some other localities. It would be well to have all cases studied with reference to their distribution and heredity.

Models and Sketches.

Dr. S. M. Burnett exhibited models made of wood and wire, illustrating the refraction of light by lenses.

Dr. B. A. Randall showed Sketches of Anomalous Outgrowths from the Optic Disk, and of Anomalous Distributions of the Retinal Veins.

Extraction of a Calcareous Lens, Giving Good Vision.

Dr. D. Webster reported the case. The left eye had been lost by injury, and was enucleated. The right had been the seat of iritic inflammation, and subjected to various operations. One attempt to extract the partly calcareous remains of the lens failed. A second attempt was successful, giving the patient vision equal 20-20.

The Numbering of Prisms.

Dr. E. Jackson explained his proposition to change the system of numbering prisms; and a committee consisting of Drs. Jackson, H. D. Noyes, and S. M. Burnett was appointed to consider the matter and report to the next meeting.

The meeting adjourned to meet in special session at the Arlington House, Washington, D. C., September 19, 1888.

Periscope.

Paralysis of the Fifth Nerve, Associated with Cataract.

At the meeting of the Ophthalmological Society of Great Britain, June 14, 1888, Dr. W. J. Collins showed a case of paralysis of all parts supplied by the sensory branches of the right fifth nerve. The muscles of mastication were unaffected. There was no history of syphilis and no cerebral symptoms. The patient had suffered from severe pain in the anæsthetic parts for eight months, and the sight of the right eye had failed. There had been no herpes, and no conjunctival or corneal affection whatever. There was diffuse opacity of the right lens; the left eye and side of face were normal, and vision was good. He considered that the lesion was located somewhere between the root of the nerve in the pons and the subdivision of the Gasserian ganglion. This case conflicted with the views of Snellen and others respecting trophic nerves. Here the lens, non-innervated, and protected from foreign irritants, suffered, while the highly-innervated and anæsthetic cornea retained its pellucidity, notwithstanding eight months' habitual exposure. Mr. T. Pridgin Teale mentioned a case of cataract, in which puncture of one lens was followed

by suppuration of the globe. The patient died shortly afterward with aphasia, due to cerebral hemorrhage, which was not entirely recent, but partly resulted from an accident many months previously. He suggested that the disastrous results to the eye might have been the result of the nervous lesion.—*British Med. Journal*, June 23, 1888.

Relief of Migranous Headache.

Dr. James Little, President of the King and Queen's College of Physicians in Ireland, in a communication published in the *Dublin Journal of Medical Science*, June, 1888, says that, though the typical form of migraine—consisting of the visual disturbance, hemicrania, and nausea—is not a very common affection, we frequently meet with persons suffering from headaches which seriously interfere with the occupations and comfort of life, and which appear to him to be of the same nature as the special neuralgia to which the term migraine is applied. These headaches occur at various intervals, sometimes only three or four times in the year, sometimes two or three times in a week. It is usually described as a dull disabling headache, and is first felt on awaking or immediately after getting up. Generally those who suffer from it say that they go to bed the previous night feeling especially well, but occasionally they have a warning of the approach of the attack on the previous afternoon. Sometimes the headache goes away after breakfast, but far more frequently the sufferer is unable to take breakfast, or finds that, whether he can take it or not, the headache increases. During the day he has distressing fits of retching, but usually is able to sleep when night comes, and the following morning he awakes merely weak. In a certain proportion of cases the headache is at first limited to one brow; and in these the invalid is less fortunate, for he generally finds that on awaking on the second day the pain has not gone, but has merely crossed over to the previously unaffected side of the head. The diagnosis of the nature of these attacks is very important. Those who suffer from them generally regard them as due to derangement of the digestive organs, and some of their advisers take the same view, and endeavor to avert the attacks by rigid care in diet and by medicines which act on the liver and digestive organs. Such measures, Dr. Little thinks, are very seldom of advantage, not infrequently rather the reverse; and, in speaking of these headaches as being allied to migraine, he desires to convey the idea that they are really neuralgic, and are to be postponed and relieved, when they come, by treatment directed to the nervous system.

Of the means which are useful in lessening the frequency of these headaches, he says the most efficacious are abundant exercise in the open air, a nourishing diet, sponging with hot water in the morning, followed by the cold douche over the shoulders and spine, and a very sparing use of tea. Among drugs the combination which has appeared to him to do most good is a pill containing:

℞ Sodii arseniat. . . . . gr. 1-12
Ext. cannabis Ind. . . . . gr. ⅙
Ext. belladonnæ . . . . . gr. ⅓
Zinci valerianat. . . . . gr. ii
M. Sig. Take after breakfast and dinner.

Up to October, 1885, he did not know of any treatment which had any distinct power of cutting short the attack when it came, or even mitigating its severity. Most patients found that if they refrained entirely from any attempt to take food, and were able to lie in a darkened room, they did all which was possible to lessen the intensity of their sufferings. Those who had on the previous evening a warning of their impending attack sometimes thought they kept it off by a full dose of bromide taken at bed-hour. Others found that a dessertspoonful of the granular citrate of caffein was beneficial, while some told me that lemon-juice or vinegar relieved the sickness and headache; but at this time it occurred to him to try salicylate of sodium, and, after more than two years' experience of its strikingly beneficial effect, he feels justified in commending it. He is in the habit of directing the patient, when he awakes with any feeling of headache, to take twenty grains of the salicylate in a wineglassful of water, made effervescent by the addition of a dessertspoonful of the granular citrate of caffein, and, if necessary, to take a second or even a third dose at intervals of two hours. The effervescing caffein makes the dose a very palatable one, which the salicylate alone is not, and probably renders it more useful; but that the good effect is not due to the caffein is proved by the fact that he has seen it relieve persons who had previously used the caffein alone without benefit. It does not, as far as he knows, lose its effect, as a patient of his, to whom he gave it more than two years ago, says that she finds it as valuable as when she first began its use. One woman informed him that she doubted the advantage of keeping off the attack, as she found that it did come at last, and was then far more

severe than ever. This, however, has been in Dr. Little's experience a solitary instance of the storing-up of the nerve-storm—a phenomenon which has been from time to time observed when epileptic seizures were postponed by the administration of the bromides—and its occasional occurrence does not lessen the propriety of keeping off the headaches when it can be done.

Dr. Little then reports the following illustrative cases:

"*Case 1.*—On November 25, 1885, Miss H., aged thirty, consulted me for attacks of pain in the left eye, and around, and to the outer side of, the eye. The pain was always felt on first awaking, and was accompanied by general headache and by nausea. She had pain in the region of the sigmoid flexure, and very confined bowels, and she had noticed that if she neglected taking aperient medicine the attacks were more severe. She also suffered from coldness of the hands and feet, but was otherwise in good health.

"I prescribed the pills to which I have already alluded, an aperient, consisting of equal parts of the liquid extract of cascara and syrup of ginger, and the salicylate of sodium and caffein. I never saw the lady again, as she does not live in Ireland; but six months afterward her mother consulted me, and told me that the salicylate and caffein had proved quite effective for cutting short the attacks.

"*Case 2.*—On March 20, 1886, Mrs. M. consulted me. She had suffered from headaches for about ten years; up to December, 1885, they had occurred about once every three weeks. Since that date, she had had one nearly every week, and they had been much more severe. She slept well; but, on awaking, felt shooting pains in the back of the head and tightness across the forehead, which ended in dull heavy pain all through the head, often accompanied with feeling of pins and needles in the right hand. She also suffered from feelings of distension after meals, an unpleasant taste in the mouth, and confined bowels. She had already tried the granular caffein, and had found it sometimes useful. I advised her to dine early and take more exercise, to keep her bowels open by a pill of calomel, aloes, and asafetida, which had many years before been ordered for her by Sir Dominic Corrigan, to take hydrochloric acid after dinner, and the salicylate and caffein when she awoke with headache.

"More than a year afterward, I heard from her that she had found the salicylate and caffein most effectual in keeping off her attacks.

"*Case 3.*—Last summer a married woman, aged fifty-eight, sought my advice on account of headaches, which had begun eight years previously, two years after the cessation of menstruation. At first she had the headache every three or four weeks; but of late the intervals had been only ten or twelve days. The evening preceding the attack she feels drowsy, and during the night often has nightmare. She awakes about five o'clock with throbbing pain in the vertex, and retching almost immediately begins, and continues violently and convulsively during the day, so that she cannot leave her bed—the pain in the vertex continuing all the time. About eight o'clock in the evening her sufferings begin to abate, and next morning she is as well as usual. Much pale urine is passed during the attack; her appetite is always poor; she eats little butcher's-meat, and has confined bowels. She suffers almost every night, more or less, from nightmare, and is constitutionally anxious and easily worried. This patient had consulted a London physician, who deservedly has a great reputation for his knowledge of maladies of this nature, without benefit, and had been long under the care of one of the most skillful Dublin physicians, at whose suggestion I saw her. I advised her to take pills of bromide of zinc and Indian hemp twice daily, and to use the salicylate and caffein when the attack began. The pills had no effect in keeping off the attacks; but the salicylate and caffein proved quite effectual in cutting short each attack, and had not lost their power after nine months."

Self-Mutilation of the Scrotum.

Dr. Alexander A. Leshtchinsky reports the following case in the *Russkaia Meditzina*, No. 6, 1888, p. 97: An intense aversion felt by the kind-hearted, peaceful, and industrious Russian peasantry toward the military service from century to century, furnishes a near and sufficient explanation of the fact that all over the vast empire there flourishes a numerous class of specialists—mostly retired *feldshers*, medical assistants—whose practical work consists in secretly maiming recruits in all possible ways affecting the qualification of the patient as an "unfit." The tale of Dr. Leshtchinsky may be taken as a typical illustration of what is daily done by the "surgeons" in question. The author was recently called to an athletic Lettonian peasant of twenty, by his brother, who frankly confessed that, about five days before,

the patient had been made "unfit" by a local *feldsher* in this way. The "surgeon" had taken the lad to a Russian bath, placed him on the *polok* or sweating-loft, and, after a good "steaming through" of the field of operation, pierced the patient's scrotum, through its whole thickness in an upward direction, by a big (saddler's) needle armed with a thread soaked in a caustic oily yellowish liniment; having drawn the needle out of the upper puncture, the operator had cut the thread with scissors, and withdrawn it from the lower punctures. At the time, the lad felt only a slight local burning; but on the next day there appeared a rapidly increasing, exceedingly painful swelling of the scrotum, with a vivid redness; on the third day a rigor followed, while pain and swelling became so great that the lad walked with difficulty. On the fourth day an abscess about the puncture made its appearance, bursting spontaneously and giving vent to a profuse blackish purulent discharge. When seen by the author on the fifth day, the patient lay on the floor with widely separated thighs, and was loudly groaning from an agonizing pain. His scrotum was found to present an intensely red, glossy, tense globe as large as the head of an infant of two or three months. Its lower integument, however, was covered with vesicles, erosions, and dark-blue sloughing spots, while on its posterior aspect, corresponding to the right testis, there was seen a large irregularly oval ulcer of the size of a florin, with uneven ragged edges and flat bottom lined with a grayish tallow-like coat. The right testis and epididymis were considerably enlarged and highly tender. Under the influence of an antiseptic dressing and ice, the youth recovered in about a fortnight. His purpose had been realized, the recruiting committee had rejected him as an "unfit" on the ground of an examination on the third day of his self-inflicted disease. —*Annals of Surgery*, July, 1888.

Posterior Spinal Sclerosis.

At the meeting of the Cincinnati Medical Society, June 5, 1888, Dr. W. H. DeWitt presented a case of posterior spinal sclerosis. The patient was a lithographer, aged 37, married, and having a family. So far as the use of alcohol was concerned, the man was temperate in his habits. He occasionally drank beer, but for several months past he had not done that. Since his seventeenth year he has been an inveterate smoker, but this too, and the use of tea and coffee, he abandoned some time ago. For the past five years he has complained of paroxysmal pains. For the past three years the pain has been circumscribed, located to the left of the lower dorsal region. The ataxia is only of recent development. The pain has been so severe at times that morphia was demanded for its relief. There was no disturbance of vision, but there was some difference in the size of the pupils. There was a difference, too, in the reflex response of the pupils to light, it being much more marked on the left side. The right one was very sluggish. There had been no visceral crises in this case. There was no trouble with the stomach or bowels, and none with the bladder. There was pain along the great sciatic nerve, and on the outside of the foot. He had difficulty in walking, especially at night. Walking up or down stairs was done with some difficulty. About five months ago he began to experience a numbness on the right side below the knee. The condition of the patient has improved under the use of the galvanic current and 1-6 grain of calabar bean before meals, and 1-25 grain of phosphorus after eating. The man has no history of syphilis. Sensibility of the soles of the feet, especially at the base of the large toe. is much less than normal. It is more marked in the centre of the sole. One of the interesting points in this case is the duration and locality of the pain. Its duration of five years is unusual, as is also the location of the pain in the lower dorsal region. Authors speak of abdominal and perineal pains.—*Cincinnati Lancet-Clinic*, June 30, 1888.

Some Cases of Habit Chorea and their Treatment.

In a paper on Some Cases of Habit Chorea and their Treatment, read before the Philadelphia County Medical Society, May 9, 1888, Dr. G. E. De Schweinitz said that it is well known that there are certain local choreas for which no definite cause can be assigned, and in which, as Dr. Wood puts it, the movements closely simulate purposive acts. A child suffering with this malady is brought for treatment because it has adopted some trick of gesture. An eye may be rapidly winked, or the eyeball rolled upward, or the brow wrinkled, or the facial muscles contorted, or, it may be, the shoulder is shrugged, or a forward movement of the head or jaw indulged in. At first, these movements are under the control of the will, but they gradually become more and more

obstinate and more and more aggravated, especially when attention is drawn to them, and sometimes the variety of the performances in a single day is truly remarkable. Dr. Weir Mitchell has given the name habit chorea to this affection.

After giving the histories of seven cases, with the results gained by the use of atropine or other mydriatic to full ciliary paralysis, and the correction of errors of refraction in the eye, Dr. De Schweinitz, in summing up, says that in three of them the habit spasm, as Gowers would say, had existed for a long time, and judicious internal medication and proper hygiene had failed to achieve the desired result; which result, however, was attained after the eyes had been thoroughly treated and corrected. In two others, the constitutional and the eye treatment were begun simultaneously, and the rapid improvement showed the value of this combination. In one instance, the eye examination and the correction of the anomalies of refraction were declined, and the habit still continues. In another, the wearing of the glasses was the only course pursued, and the result was most favorable. In all the cases, where errors of refraction existed, these were either hypermetropia or hypermetropic astigmatism; in two, the errors were two dioptres and more; in three, less than one dioptre, and in one the eyes were emmetropic. Dr. De Schweinitz calls attention to the fact that so low an error as half a dioptre may prove an exciting cause, the removal of which aids in restoring the patient to a normal tone. Case III, he says, is especially interesting, because here a general chorea disappeared, and in its place came a habit chorea. Exactly as Dr. Mitchell has observed, in a few instances, these cases lapse into well-pronounced chorea of the ordinary type. It is further useful to observe, he says, that the eyes in this case were emmetropic, but that, when the existing spasm of accommodation and phlyctenular conjunctivitis had disappeared under the use of the atropine, the patient made rapid strides along the road to recovery. He then speaks of the value of closely observing the condition of the conjunctiva, especially of the retro-tarsal folds, in this malady. Years ago, he says, the late Prof. Fr. Horner called attention to the fact that children, when first they attended school, were sometimes observed to be given to undue winking of the eyes, and that without the presence of strong light. As an accompaniment, there were often movements of the muscles of the face, arm, or leg. In these cases, the local cause was most often found to be some disorder of the conjunctiva, especially follicular catarrh, blepharitis, or an anomaly of refraction, usually hypermetropia. Indeed, in a few instances, the local condition was manifestly the exciting cause of a chorea minor. Treatment of the conjunctival catarrh and correction of the hypermetropia removed the difficulty. Dr. De Schweinitz thinks that not only may the local conjunctival disturbance and the refraction-errors exist, but there may be also imperfect equipoise of the eye-muscles. It is scarcely necessary to refer to this as a possible important factor. In recent times, much graver nervous disorders have been attributed to such insufficiencies of the ocular muscles, and, for their correction by surgical and other means, most brilliant results have been claimed.

Dr. De Schweinitz disclaims any intention to give an undue importance to these errors of refraction and inflammation of the conjunctiva as exciting agents in the causation of habit chorea. He does not forget that the large number of instances which may be directly traced to nasal disorders, to diseases of the pharynx; nor that other large class to which no adequate cause can be assigned. He only wishes to recall to the memory the value of searching for these among the other causes, and to emphasize the fact that, if the habit spasm especially affects the muscles of the face, particularly those around the eye, the following points deserve attention:

1. The condition of the refraction and the muscular balance should be carefully examined, and, if found abnormal, corrected.

2. The anomaly of refraction should be determined under complete ciliary paralysis, and the full, not a partial, correction ordered.

3. This correction should be employed in conjunction with proper internal medication and general hygiene, and not to the exclusion of these measures.

—Mrs. Wilhelmina Rhodes, an inmate of the Pennsylvania Hospital for the Insane, committed suicide by hanging, at the institution, July 27. It is said she was troubled with mental depression for years. One of the attendants is said to have seen her alive at five o'clock in the morning, and at half-past six o'clock the head nurse found Mrs. Rhodes suspended to a wardrobe by a sheet. She was already dead.

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INDICATIONS FOR THE REMOVAL OF THE UTERINE APPENDAGES.

There is no subject in the whole field of gynecology about which there has been a greater confusion of ideas than the diseases of the uterine appendages, and the indications for their removal. This has been largely the result of a faulty nomenclature. Pelvic peritonitis, recurrent or menstrual peritonitis, ovaritis, cellulitis, ovarian abscess, and pelvic abscess have long been recognized as morbid conditions. But when, through the work of Tait, Hegar, and others, the etiological relation between disease of the tubes and the adjacent tissues became more generally recognized, and the terms salpingitis, peri-salpingitis, pyo-salpinx, tubo-ovarian abscess, etc., began to appear in current literature, these morbid conditions were not at once recognized under their new names. It is the etiology rather than the pathological anatomy of pelvic disease that has been advanced in the last ten years by operating surgeons.

The most radical change of opinion is that regarding the frequency of pelvic cellulitis. It has been conclusively shown that the "cellulitic masses," formerly so much discussed, are almost always enlarged tubes or ovaries, and that cellulitis and abscess of the pelvic cellular tissue, distinct from tubal and ovarian disease, are rare conditions.

The most frequent indication for removal of the uterine appendages is incurable inflammation. Cases of inflammation of the appendages may be conveniently divided into those in which pus is present, and those in which it is absent. When pus is present—either in the form of pyo-salpinx, purulent infiltration of the tube, or abscess of the ovary—it is generally accepted that the indication for removal is absolute. The surgical law that pus should be evacuated does not except pus in the pelvis. The ovaries and tubes are removed because they are pus-sacs. Until they are exsected, the woman's health is more or less destroyed, and she is constantly menaced by the danger of death from purulent peritonitis, set up by rupture of the sac and leakage of pus. Most operators favor the removal of both tubes and ovaries, even though the disease appears to be unilateral, especially in gonorrhœal cases. Where this cause can be excluded, a few operators leave the healthy tube and ovary. In cases of salpingitis and ovaritis, in which pus-formation has not occurred, the patient's life is seldom endangered. Here, operation is indicated only when the health is failing, or life is made miserable by suffering, in spite of well-directed conservative treatment. Cases of hydro-salpinx and hæmato-salpinx may be included in this class. Lawson Tait's name will ever be associated with the operation of removal of the appendages for inflammatory disease.

Before the successful application of elec-

tricity to the palliation and cure of uterine fibroids, and the arrest of metrorrhagia from other causes, the operation of removing the ovaries and tubes for the arrest of otherwise uncontrollable hemorrhage from the uterus seemed to have a brilliant future. The indication was based upon the well-known fact that uterine fibroids tend to undergo retrogressive changes after the natural menopause, and the object sought was to end menstrual life. Should electrical treatment yield the brilliant results which it promises, this field for the operation will be greatly restricted. It should not be forgotten, however, that fibroid tumors of the uterus are often associated with marked disease of the appendages. The ovaries were first removed for uterine fibromata by Trenholme and Hegar.

A less frequent indication for the removal of the ovaries is cystic degeneration and hæmatoma. Cystic degeneration, or hydrops folliculorum, is frequently associated with morbid conditions of the uterus, and with various reflex neuroses.

Ovarian hernia and absence or rudimentary development of the uterus, of such a character that the menstrual secretion is made impossible, although ovulation exists and gives rise to molimina and other disturbances, may call for the removal of the ovaries. In all cases, when convenient, the tubes also should be removed.

The final and least certain indication for removal of the uterine appendages is afforded by severe nervous and mental diseases, which stand in close etiological relation to the sexual functions. In these cases the bimanual examination usually affords no evidence of disease of the appendages, nor is this apparent on microscopical examination after removal. The operation should only be done when the indication is urgent, and after careful differential diagnosis, and the failure of conservative treatment properly carried out. It is with this class of cases that Battey's name is especially associated.

CONTAGION BY RESPIRATION.

The part borne in the communication of contagious diseases by respiration of the breath or cutaneous exhalations of diseased persons is by no means fully understood. There are those who are inclined to attribute an important *rôle* to this act, while others do not think it very important. An interesting contribution to the subject has been made by Cadéac and Malet in the *Lyon Médical*, No. 14, 1887, and an abstract of their report is contained in Virchow and Hirsch's *Jahresbericht*, vol. i, part 2, for 1888.

According to this abstract, Cadéac and Malet, by an ingenious series of experiments, demonstrated, as clearly as a negative can be demonstrated, that the prolonged and exclusive respiration of the breath of animals affected with splenic fever or sheep-pox will not communicate the disease to other animals. The emanations of portions of the bodies of animals dead of various diseases—such as erysipelas, splenic fever, tuberculosis, and septicæmia—proved equally ineffectual to produce the same diseases when conveyed directly into the lungs.

These results tend to confirm the opinion to which ordinary clinical observation might lead one—that breathing an infected atmosphere is not a very dangerous mode of infection. If it were, it would be hard to explain the immunity of nurses and physicians who are brought into such frequent and intimate relations with persons suffering with contagious diseases. Experience indicates that much of the fear felt by the laity in regard to the gaseous emanations of the sick is the result of preconceived notions, and is not warranted by any accurate observations.

This fact may serve to reassure those whose lot is hard enough in caring for persons affected with serious diseases without the addition of imaginary terrors, while it could not be strained by any sensible person to excuse the omission of any practicable measures to secure fresh and pure air for the lungs of both patients and attendants. There may be no great danger in the breath

or cutaneous emanations of a sick person, but they are certainly far from pleasant, and fresh air is a most important requisite for recovery from sickness and for escaping the risk of contracting disease.

LOCAL EFFECT OF LIME-WATER.

We have more than once of late called attention to the virtues of certain medicines and methods which have apparently been almost forgotten in the exciting and fascinating pursuit of new remedies, and whose quiet achievements have seemed to pale before the bold claims and glittering promises of the chemical and physiological laboratories.

These medicines and methods have been of that interesting class which illustrates the value of the empirical method, and the fact that the art of medicine still keeps far in advance of the science. Long before the *rationale* of the action of balsams upon wounded and inflamed surfaces was understood, men applied balsams successfully; and no doubt many a medicament now in successful use will wait long before its *modus operandi* will be understood.

But it is interesting when science begins to furnish an explanation of what art has been practicing, and it is gratifying to the human mind to think it knows why, as well as what, it does. A good example of this state of things is furnished by some recent discussions of the mode of action of lime-water, when used as a remedy for various anginas. Our readers know the reputation of lime-water as a solvent for false membranes, and they may have been puzzled at times to reconcile this reputation with its well-known astringent properties. In the *Berliner klinische Wochenschrift*, No. 18, 1888, Dr. E. Harnack gives a clear summary of what is now known in regard to the action of lime-water in dissolving the mucin which agglutinates the diverse elements of most false membranes, in combining with the fatty acids contained by all of them, so as to saponify them, and in rendering the mass easy to disintegrate by its mild astringent properties. Harnack is disposed to attach some importance to the liberation of carbonic acid from lime-water, in the presence of false membrane, and the deposit of fine particles of lime which mechanically interfere with the propagation and movement of micro-organisms. The latter notion is perhaps a trifle fanciful; but the rest of the explanation is as satisfactory in a scientific sense as it is gratifying to the complacency of those who like to regard medicine as a science as well as an art. To those who have learned to regard lime-water as by far the best, as well as the simplest, local application in diphtheria, it is pleasant to have an explanation of how it produces its grateful effects, and a scientific authorization for their empirical methods. But this mental gratification does not compare in importance with the value of a knowledge of the fact that lime-water is an admirable remedy in cases of diphtheria. Its local effect is most useful in cleansing and purifying the fauces, and its mode of application is the easiest imaginable. It requires no spray apparatus, no douching, and no effort at gargling. It is sufficient to have the patient slowly swallow a teaspoonful or more every hour, in order to get good results from its use. This fact is of the greatest importance in treating children, who are too often cruelly tortured in the attempt to make local applications to the throat. Lime-water can be given easily, and is taken readily by children; and there are, we believe, few cases of diphtheria which require a more energetic local treatment than the one just described. In fact, we think that an early clearing-out of the bowels with calomel—sometimes in massive doses—followed up after a short interval by the administration of lime-water, and the use of a suitable tonic and roborant regimen, constitutes a method which comes the nearest to being of universal applicability of any one with which we are familiar; and we think that the use of the lime-water is of more consequence than any other part of the treatment, except it be the preliminary purgation.

EPISTAXIS AND INTERSTITIAL NEPHRITIS.

The occurrence of grave hemorrhage from the nose is not very common, but it is by no means so infrequent that a serious inquiry as to its causation should be passed by without notice. In the *Gazette Hebdomadaire*, July 6, 1888, there is a communication by M. E. Gaucher, in which an attempt is made to show, on the strength of a single observation, that severe epistaxis may be due to interstitial nephritis. The communication is very interesting, and may supply a suggestion of great value in studying the conditions surrounding a case of severe and unprovoked epistaxis. Unfortunately, however, there are features connected with it which rob it of much of its supposed value.

In the first place, the case reported stands alone; in the second place, if the diagnosis was correct, the presence of interstitial nephritis in a person who suffered with dangerous hemorrhage from the nose may have been a mere coincidence. But the most serious defect in the report is found in the fact that it contains no evidence that the patient had interstitial nephritis except the statement that he had a considerable quantity of albumin in his urine. The absence of any statement in regard to a microscopical examination of the urine makes the assumption that interstitial nephritis was present wholly gratuitous. It is not unlikely that this assumption was correct; but it cannot be accepted on the evidence offered.

Notwithstanding this fact, the suggestion of M. Gaucher deserves attention; and it might throw useful light upon the subject of grave epistaxis if medical men made a habit of examining the urine carefully in all cases where it occurs without an obvious cause, and, if it were found that disease of the kidney was a regular concomitant of it, the treatment would not be limited—as it now is, in most cases—to efforts to control the bleeding by local applications, and to the time when the hemorrhage takes place.

We commend this matter to the attention of our readers who may have opportunity to confirm or correct the opinion expressed by our French colleague.

CARBOLIC ACID IN SMALL-POX.

The experience of Dr. A. Montefuso in a recent epidemic of small-pox in Naples indicates that carbolic acid is capable of yielding excellent results in the treatment of this disease. Its use as an ointment did not prove especially beneficial, but, according to the *Bulletin gén. de Thérapeutique*, April 15, 1888, doses of from fifteen to thirty grains (daily?) in about eight fluid ounces of water, for adults, led to a decided and usually permanent fall in temperature, with diminution in the frequency of the pulse and improvement in its force.

Montefuso came to the conclusion, from his experience, that carbolic acid is the only remedy which has a real influence upon the eruption in variola He found it to limit the extent and the duration of the eruption, although he does not claim for it an abortive action. When used at the beginning of an attack, the pocks are often seen to become wrinkled and to dry up in a few days, without involvement of the subcutaneous connective tissue. When suppuration has already begun, the effect on the eruption is not so obvious, but the effect on the constitutional condition is manifest.

Montefuso did not observe any disturbance of the gastro-intestinal canal, or—except in one case—of the genito-urinary apparatus, from the doses he used and recommends. The only contra-indication to the administration of carbolic acid in small-pox which he mentions is marked nervous manifestations.

If the observations just cited have been carefully made, they certainly justify testing the value of this remedy further. It is not the first time it has been proposed; but Montefuso's experience is one of the most encouraging with which we are acquainted. It will not be forgotten that the treatment of small-pox nowadays is largely symp-

tomatic, and that the fatality of the disease under any treatment is much less than it was formerly; but any remedy which has a decided influence upon the fever and the development of the eruption would be a valuable addition to the physician's armamentarium.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

THE LANGUAGE OF MEDICINE. By F. R. Campbell, A.M., M.D., Professor of Materia Medica and Therapeutics, Medical Department of Niagara University. Octavo, pp. viii, 318. New York: D. Appleton & Co., 1888. Price, $3.00.

The object of this book is to provide the medical student with the means of acquiring a correct vocabulary of medical science, and is intended for those who have not had the advantage of a classical education. It contains a sort of epitome of Latin and Greek grammar, with exercises intended to familiarize the student with the subject. We are of those who believe that the best preparation for the study of medicine would include a study of the classics, and are disposed to regret that any student should require a book of this kind. As, however, there are many such students, we very warmly recommend to them this book, which is admirably conceived and admirably executed. One of its merits, we think, is that it is likely, if properly appreciated, to give the student a taste for classical education, which may happily lead him to more profound studies.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

A New Method in the Treatment of the Vegetable Parasitic Diseases of the Skin. By Henry J. Reynolds, M.D., Chicago. Read before the Section on Dermatology, Ninth Inter. Med. Congress, Washington, D. C. 8 pp.

Water. Its Impurities, gathered from the Air and Earth. By C. W. Moore, M.D., San Francisco. From the *Pacific Record of Medicine and Surgery*, March 15, 1888. 79 pp.

—Dr. Reynolds proposes the application of parasiticides to the skin, with the favoring action of the electric current. It is well known that the electric current facilitates the passage through the skin of absorbable medicaments, and Dr. Reynolds applied this principle in the treatment of a case of favus and two cases of tinea tonsurans with entire success. His experience has since been confirmed by Drs. Charon and Gevaert, of Brussels, who used corrosive sublimate in solution—three to five parts per thousand—as the parasiticide. Dr. Reynolds does not state what he used, but gives plain directions as to the way in which the electricity is to be employed. His paper must prove of interest, for anything which suggests a way of cure for stubborn skin-diseases must be interesting. It may be remarked that the method he suggests might prove useful in scabies, as well as against vegetable parasites.

—Dr. Moore has gathered into this pamphlet a number of facts relating to the impurities contained in water, and especially the drinking-water of San Francisco. Incidentally, he discusses the nature of bacteria and the origin of life. His views are in some respects singular, as he seems to believe in spontaneous generation. He, however, makes a warm plea for securing the highest degree of purity possible in drinking-water, and advocates filtration and a special apparatus for this purpose.

Literary Notes.

La Médecine Hypodermique is the name of a journal to be published in Paris, of which the first number has just reached us. It is dated July 1, 1888. Its price is four francs a year, and, after January, 1889, it is to be issued monthly. Persons subscribing now are to receive *gratis* the numbers until January 1. The first number contains 13 pages devoted to medical science, eight of which are devoted to hypodermic medication.

Ipecacuanha Spray in Throat Cough.

Dr. Wm. Ellery Briggs writes to the *Sacramento Medical Times*, July, 1888, that, since reading of Dr. Morrell's use of ipecacuanha spray, he has used it in five cases, all of which improved in a gratifying manner, so that he with much confidence recommends it to the profession. The first case in which he used it was one of catarrhal laryngitis, in a patient 26 years of age, with phthisical family history. After the second inhalation of a drachm and a half of ipecacuanha wine and an equal quantity of water, his cough was much relieved and the expectoration diminished; and after the tenth daily administration, he considered himself entirely well, and went to the country to continue work on a ranch. The vocal cords and mucous membrane of the larynx were less congested after the third application, and appeared quite healthy when he discontinued treatment. When first sent to Dr. Briggs for treatment, his paroxysms of coughing were violent and almost continuous. This condition had existed for more than a week. A second case was similar in its effects, in a young man of 30, who had been suffering for several months, and had been under Dr. Briggs's treatment for the laryngeal affection for three weeks previous to the use of this remedy, without very marked improvement. The three remaining cases, he says, present no special point of interest. It may be administered with a steam atomizer or a hand-spray. If used by the latter method, the solution should be warmed previous to its inhalation.

CORRESPONDENCE.

Picric Acid Test for Sugar.

TO THE EDITOR.

Sir: Will you please publish in your next issue the picric acid test for diabetic urine and oblige A SUBSCRIBER.

Chillicothe, Ohio,
July 28, 1888.

[To a fluid-drachm of the urine, add forty minims of a saturated solution of picric acid, and then half a drachm of liquor potassæ. Boil the mixture, and, if sugar is present, a dark mahogany-red color will be produced, due to the reduction of picric acid to picramic acid. EDITOR REPORTER.]

NOTES AND COMMENTS.

Summer Diarrhœa or Entero-Colitis.

Dr. Louis Starr, Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, writes as follows in the *Medical Standard*, July, 1888:

Therapeutic measures often fail in relieving this condition when they are uncombined with rigid enforcement of the general rules of health. The main hygienic features to receive attention are the following: Fresh air must be secured by taking the child to a public square in the cool of the morning and evening, or, better still, by a morning or evening trip on the water. The heat of the day must be spent in as cool a room as can be had. Coddling is to be discouraged, as many a stout mother has hastened her infant's death by too fond and constant nursing in the arms. The clothing must be as thin as possible, provided that woolen is always worn next to the skin. Twice or three times a day in very hot weather, the whole surface of the body must be sponged with water at a temperature of 80° F. and dried with gentle rubbing. The addition of rock salt renders these baths more bracing. Full warm baths must supplant the cold sponging if there is much prostration.

The diet is to be most carefully regulated as to quality, quantity, and intervals of administration. Sound cow's milk must form the basis of the food in bottle-fed babies, and peptogenic powder is a very useful addition to it.

Medicinal treatment varies with the case. Should the patient be seen early in the attack, it is initiated by a laxative. A teaspoonful of castor oil with ten drops of paregoric, or the same quantity of spiced syrup of rhubarb, is sufficient for an infant of one year. Afterward, while the stools are yellow, homogeneous, and not very frequent, alkalies and astringents are employed:

℞ Sodii bicarb. . . . . gr. xxxvi
Syr. rhei aromat. . . . . ʒ iv
Mist. cretæ . . . . . q. s. ad ʒ iii

M. S. One teaspoonful every two hours for a child one year old.

When the stools are frequent, green, and acid in reaction, the following may be employed:

℞ Syr. rhei aromat. . . . . ʒ iv
Bismuth. subcarb. . . . . ʒ ii
Syrupi acaciæ . . . . . ʒ iv
Misturæ cretæ . . . . . q. s ad ʒ iii

M. Sig. ʒ i every two hours. At the same time the abdomen is to be reddened two or three times a day with a weak mustard draught—one part of mustard to five of flour.

If the evacuations are liquid and contain whitish or greenish flakes, and the above treatment fails after a fair trial, good results often follow a short mercurial course, thus:

℞ Pulv. ipecac. comp. . . . . gr. ii
Hydrarg. chlor. mit. . . . . gr. ss
Cretæ preparat. . . . . gr. xxxvi

M. ut ft. chart No. xii. S. One powder every two hours for twenty-four or forty-eight hours, or until the stools become yellow and homogeneous.

Should the stools be frequent and serous, more powerful astringents are used, as aromatic sulphuric acid, silver nitrate, or zinc oxide.

When the stomach is very irritable, rectal injections are resorted to, the drugs used being tincture of opium, nitrate of silver, and ipecacuanha. Ipecacuanha is chosen where there is much tenesmus with the discharge of blood and mucus. It may be administered as follows:

℞ Ext. ipecac. fl. . . . . m xii
Tr. opii deod. . . . . m viii
Mucilag. acaciæ . . . . . q. s. ad ʒ i

M. S. Inject one tablespoonful every four hours.

Stimulants—wine of pepsin, brandy, or whiskey—are given in all infantile cases where there is prostration.

In cases of recovery, the diet and hygiene must be carefully watched until all danger of a relapse has passed; the astringents are gradually dropped, and digestants and tonics ordered.

The antiseptic treatment recommended by L. Emmet Holt, I have lately tried with good results. It embraces the careful attention to regimen already alluded to, preliminary evacuation of the bowels with castor oil, and the administration of naphthaline or

of sodium salicylate. Naphthaline is usually ordered as in the following prescription:

℞ Naphthaline,
Ground coffee . . . . . āā gr. vi
Sugar of milk . . . . . gr. xxiv
M. ut ft. chart No. xii.
S. One powder every two hours.

In conclusion, it may be well to draw attention to the fact that the key-note of successful treatment seems to be the maintenance of constant circulation in the contents of the intestinal tract. The object of this is to sweep irritating fecal matter or secretions away from the intestinal mucous membrane and give the latter an opportunity to recover from the catarrhal inflammation affecting it. Castor oil and calomel are the best drugs to accomplish this, and small frequently repeated doses are to be preferred to single large ones, active purgation being undesirable. With bowels so swept, a bland unfermenting diet, and attention to the health-rules already mentioned, every aid is furnished to secure the successful action of such remedies as bismuth subcarbonate, naphthaline, and sodium salicylate.

On the other hand, should opium be used to lock the bowels, one great factor in the causation of the disease is fortified in its position, and an increase in the degree of inflammation almost invariably results. The opium used in the foregoing prescriptions is only intended to prevent griping or to secure retention in the case of the injection, not for the purpose of checking peristaltic action of the intestine

In some cases, especially when there is irritability of the stomach, milk, in no matter what form or how prepared, seems to keep up the disease. Under these circumstances, my plan is to order one or two teaspoonfuls of raw beef-juice every two hours, according to the age. This diet may be continued for several days until the vomiting stops and the movements improve in character, when a milk diet may be resumed.

One must not forget that a change of climate is a most efficient method of treatment, especially when the seaside is the objective point.

Poisoning with Chloroform.

Dr. Robert Hoffman, in reporting a case of chloroform-poisoning in the *Maryland Med. Journal*, June 16, 1888, says that he was hastily summoned one night to attend a man 50 years old, who 15 minutes before had swallowed a large tablespoonful of pure chloroform, which he had mistaken for a solution of iodide of potassium. The patient was thoroughly narcotized; there was no reaction of pupils; the pulse was small and frequent; respiration deep and very slow; face and extremities cold, and a strong odor of chloroform was perceptible in the man's breath. The patient's friends said that he cried out immediately after swallowing the chloroform, then fell and lost consciousness. Subsequently the patient told Dr. Hoffman that as he swallowed the medicine there was an intense burning in his throat, which is all he remembers.

Dr. Hoffman had all the doors and windows immediately opened to clear the room of the chloroform vapor, and then resorted to the stomach-pump, experiencing no difficulty whatever in introducing the tube, as there was complete relaxation of the muscles. The stomach was emptied of its contents and then washed out several times with warm milk, all of which gave forth an intense odor of chloroform. The patient after this, however, showed not the least sign of consciousness, but lay in profound coma, with reflexes entirely absent, and pulse thready. Artificial respiration was then resorted to, which succeeded after long and patient trial in causing the patient to open his eyes for a moment, but he again relapsed into his former condition. The artificial respiration was continued, supplemented with hypodermic injections of strychnine; after a short time, the patient again opened his eyes and attempted to speak. He then gradually recovered, and in a few days was entirely well.

Cystotomy in Hypertrophy of the Prostate.

M. Berger has recently read a paper before the Société de Chirurgie of Paris, on cystotomy above the pubes in cases of hypertrophy of the prostate. A man who had dysuria from an enlarged prostate was catheterized, but the surgeon who attended him made a false passage, and all further attempts to pass the catheter failed. The bladder was then cut down upon in the suprapubic region, with a view of passing the sound from the bladder. The operation succeeded, but the man was unable to support the fixed catheter, and a permanent fistula had to be made through the primary incision, and a special instrument placed *in situ*. Thompson recommends perforating the bladder through the prostate with a large trocar, but M. Berger preferred the operation just described, as there was less risk of extravasation of urine. —*Medical Press and Circular*, June 27, 1888.

Clinical Value of Sulphonal.

Dr. Julius Schwalbe, after a careful analysis of the effect of sulphonal in fifty observations (*Deutsche med. Wochenschrift*, June 21, 1888), concludes that, in its pure form, it is an agreeable agent to use on account of its freedom from odor and taste; that it acts as an hypnotic in cases of "nervous" sleeplessness, in doses of 15 or 30 grains, with very acceptable rapidity. In insomnia resulting from direct organic disturbance, occurring in a disease of short duration, its action is more or less uncertain.

It has no effect upon temperature, pulse, or respiration, and for this reason, as well as on account of the properties just mentioned, it is to be preferred to morphine and chloral in febrile diseases, and in all affections in which weakness of the heart is to be feared. It should be employed especially in children. The subjective symptoms accompanying and following its employment are not of a kind to contra-indicate its use.

Codeine for Abdominal Pain.

Dr. T Lander Brunton, in a communication in the *British Med. Journal*, June 9, 1888, on the use of codeine to relieve pain in abdominal disease, says that the results which he has obtained from the administration of codeine have satisfied him that it has a powerful action in allaying abdominal pain, and that it can be pushed to a much greater extent than morphine without causing drowsiness or interfering with the respiration or with the action of the bowels. It is, therefore, he says, specially indicated in such a case as Dr. Philpot's, in which the dilated heart and consolidated lung tended to make one afraid of morphine. Codeine is also specially indicated in a case like Dr. Pardington's, in which one wished to relieve the pain without interfering with the action of the bowels. On the other hand, in cases where there has been much diarrhœa, as in some cases of malignant disease of the colon or rectum, the absence of any tendency to lessen peristaltic movement is rather a disadvantage to codeine as compared with morphine or opium.

He has found that, in cases of long-continued enteralgia without organic disease, it has continued to relieve pain for months together, without the dose being increased beyond one grain three times a day, and he found the same to be the case where the presence of a tumor, in addition to other symptoms, had led to the diagnosis of malignant disease. It is interesting, he says, to follow the vicissitudes of a drug, and to notice how its use extends or diminishes until at last it finds its right place and maintains it. Thus digitalis, while mentioned in the London *Pharmacopœia* of 1721, was excluded from that of 1746. It again appeared in 1788, and since then it has held its place. Possibly codeine, after falling into almost complete disuse as an analgesic for many years, may again regain a more or less important place among the remedies which enable us to relieve pain.

Blue Spots in Typhoid Fever.

Dr. William Osler, in an editorial in the *Canada Med. and Surg. Journal*, June, 1888, says: "With the rose-colored rash in typhoid fever or occurring alone, there are sometimes to be seen bluish spots on the skin of the abdomen, back, and thighs, ranging in size from two to eight lines in diameter, and often arranged in groups. They were called *taches bleuâtres* by the French, and by this name have passed into literature, though the term peliomata has also been applied to them. Murchison gives a good description of them in his work on fevers (for good illustration, see his Plate V), and agrees with Jenner that they are usually seen in light cases. Though not very common, I have usually each session an opportunity to demonstrate them, and my attention has recently been directed to the subject by their occurrence in three cases in succession, all very severe.

"In my experience, they occur indifferently in severe and mild cases. The spots are not elevated, but in certain light may appear, as Forget notes, depressed. They do not occupy the same layers of the skin as the typhoid rash, but are rather subcutaneous, as the pale dermis may be seen above them. Firm pressure causes them to disappear, and they fade after death. Murchison and Jenner state that they persist after pressure; but certainly, in the cases in which I have tested this point, the lividity could usually be removed.

"The condition is not peculiar to typhoid, but occurs in relapsing typhus and simple fevers. I have never seen it except in association with the febrile state. I believe it to be a vaso-motor disturbance, inducing local areas of congestion in the subcutaneous tissue. Duquet and other French writers have expressed the opinion that they are caused by pediculi pubis, not by the punctures, but by the saliva extruded on to the skin. Certainly, the 'blue spots' occur in cases in which no pediculi can be found, and it is curious that they should come out only in conditions of fever."

Meddlesome Midwifery.

In the *Archiv für Gynäkologie*, Band xxx, Heft iii, Credé, of Leipzig, expresses his decided convictions in favor of non-meddlesome midwifery, and bases his belief on the critical study of 8,000 puerperal women. He expresses the view that what is needed is a rule of practice under all circumstances the safest in hospitals or dwellings. He cites 2,355 cases with 0.3 per cent. mortality from sepsis. He lays stress upon preventing loss of blood as far as possible, on thorough disinfection of all which has to do with the patient, and on thorough antisepsis when interference is demanded. Regarding vaginal and intra-uterine douches, he remarks: "The statement made in so many case-histories that the patient's condition became worse '*in spite of*' antiseptic vaginal and intra-uterine injections diligently used would be more correctly rendered in many cases if the word '*because*' were substituted for 'in spite of.'" He reports a septic mortality of 0.6 per cent. in the Poliklinik, where the conditions are essentially those of private practice, and he indicates this as what, in our present knowledge, might be expected in private practice.—*Medical Press and Circular*, June 20, 1888.

Menstruation in a Child Three Years Old.

Dr. H. Kornfeld describes in No. 19 of the *Centralblatt für Gynäkologie* a case of menstruation in a child three years old. The child, which was addicted to onanism, had on April 5 a hemorrhage from the genitalia, which diminished at noon, and had disappeared the next morning. An injury—an abraded spot or any other source of the bleeding—was certainly not present. Bleeding recurred regularly at the beginning of May, June, July, at precisely the very time at which the mother menstruated.—*Wiener med. Presse*, June 17, 1888.

Treatment of Chronic Diarrhœa with Talc.

The Paris correspondent of the *N. Y. Medical Journal*, July 7, 1888, says: Dr. Debove has something new to propose in the treatment of chronic forms of diarrhœa. He says: "I have found the means used for the treatment of diarrhœa to be just as numerous as they are insufficient, and I concluded it would be well to attempt to stuff the intestines with some inert powder that would not be attacked by the intestinal juices." He settled on talc, which is a silicate of magnesium. This was given in doses of from six to eighteen ounces a day. It is finely pulverized and soft, and given in portions of six ounces to a quart of milk, great care being taken to add the old formula, "To be well shaken before taken." The amount of six ounces is usually enough to obtain a complete success in phthisical patients who get diarrhœa. It is interesting to note that many of these patients could not tolerate the milk treatment, or cod-liver oil, as they caused diarrhœa, but that after the administration of talc they got on very well, both with milk and with the oil, some of them taking as much as a pound of oil in twenty-four hours afterward, when they could not stand a moderate dose before without developing diarrhœa. The talc is a very light powder, and is eliminated in twenty-four hours, when the stools will be found quite white. It does not remain stationary in the bowels, but causes constipation, which, however, is not to be feared in such cases as M. Debove used it in, as the diarrhœa was of organic cause and was almost certain to return, kept up as it was by intestinal ulcerations. The use of talc was continued for some time in many of the cases, but it has not yet been tried in children, nor in diarrhœa of hot climates, nor in dysentery.

Camphoric Acid.

In the Berlin Medical Society Dr. Reichert recently read a paper on the local application of camphoric acid in various acute and chronic diseases of the nose, mouth, and upper portions of the alimentary canal. The acid has been known for a long time, and is produced by boiling camphor with nitric acid. It occurs in colorless crystals slightly acid and bitter to taste, soluble to the extent of nine-tenths per cent. in cold water, and easily soluble in alcohol and ether. For application, the author employed a solution of one or more per cent., to which sufficient spirit is added to make it clear. For use as a gargle, a solution containing from one-half to one per cent. was found effective, while from one to two per cent. was dissolved for application as a spray, and two-tenths part in a hundred as a nasal douche. A mixture of one part of camphoric acid and nine parts of boracic acid was employed as a powder for dusting affected surfaces. Reichert commends the action of the remedy as a fit subject for further investigation.—*Chemist and Druggist*, June 30, 1888.

New Way of Preserving the Dead.

The Philadelphia *Ledger*, July 26, says: "A Pittsburg physician, named Cooper, has just applied for a patent on a process to preserve human bodies by compression. By a curious combination of steel presses and hot rollers, he excludes all the moisture and reduces a full-grown body to a very small size, 12 by 15 inches, rendering it as hard and imperishable as marble. He has made several experiments with perfect success. The doctor and others who have investigated the process think it will supersede cremation, as bodies thus preserved are not only not offensive, but can be made to assume various ornamental shapes and be kept in the parlor or elsewhere as constant reminders of the departed. The doctor has on his centre-table the remains of a child pressed into the form of a cross. It resembles the purest marble, is highly ornamental, and is perfectly odorless. The inventor proposes to place a large number of specimens on exhibition in a few days. A company will be formed to push the invention."

Abdominal Abscess Following Enteric Fever.

At the meeting of the Nottingham Medico-Chirurgical Society, May 18, 1888, Dr. Michie read notes of a case of abdominal abscess following enteric fever and treated by abdominal section and drainage. The patient complained of pain and tenderness a little to the left of and below the umbilicus during the fourth week of enteric fever. Toward the end of the seventh week there appeared a hard and tender lump in the same situation; the patient had shiverings and night-sweats. At the end of the tenth week Dr. Michie saw the case in consultation with Dr. Brown Sim. At that time the swelling was about twice the size of a cocoanut, hard, slightly tender, movable; there was no discoloration of the skin. No fluctuation could be made out; there was nothing unusual in the pelvis, temperature 100° F., pulse slightly accelerated. The diagnosis was: Abdominal abscess having its origin in a suppurating gland of the mesentery. On February 1 abdominal section was performed, the abscess opened and washed out with plain warm water, and a large rubber drainage-tube inserted. The patient was dismissed on the twenty-first day after operation, all discharge having ceased and the wound healed. Dr. Michie attributed the speedy progress of the case to (1) the equable intra-abdominal pressure, (2) the large-sized drainage-tube, (3) the absence of any washing or syringing out of the cavity after the first time. He deprecated this practice in the treatment of abscesses or wounds generally.—*British Medical Journal*, June 30, 1888.

Surgical Soap.

In the *Revue Médicale de la Suisse Romande*, No. 5, 1888, page 285, Professor Auguste Reverdin, of Geneva, speaks highly of a "surgical soap" prepared after the following formula:

℞	Oil of sweet almonds	72 parts
	Caustic soda	24 "
	Caustic potash	12 "
	Sulpho-carbolate of zinc	2 "
	Essential oil of roses	9.5 "

The preparation consists in slowly adding to and carefully mixing with the almond oil the lyes and the sulpho-carbolate, part by part, until an intimate and homogeneous mixture is obtained. The latter is kept for several days at 68° F. The mass, which gradually acquires the consistence of soft paste, is then divided into any number of portions that may be desired; these are placed in suitable molds, where they are kept till they are completely solidified. Professor Reverdin has been using this antiseptic soap since the summer of 1887, when he visited Professor Bottini's clinic at Milan, where it is extensively employed for various purposes. The soap is said to possess wonderful cleansing as well as antiseptic properties, and it does not irritate the skin, however sensitive or irritable it may be. Moreover, as the soap contains an excessive proportion of fatty substances, it does not dry the skin. The presence of potash makes the soap by far more active comparatively than a pure sodic soap, since, as Dr. Unna has proved, potash has a more energetic solvent action on the horny layer of the cuticle than soda. Professor Reverdin recommends this soap not only for general use in hospital and private practice, but also for washing the hands in dissecting-rooms and everywhere where the hands come in contact with decomposing substances. Further, he urges that barbers should universally adopt this disinfecting soap for their purposes, and thus protect their customers from various infectious diseases, to which they are exposed in their shops. Dr. Reverdin has also obtained good results from this soap in various cutaneous affections. Finally, it is a very pleasant toilet-soap, as he himself and many of his patients and friends have found.—*British Med. Journal*, June 30, 1888.

Listerine.

A compound has recently been introduced under this name as a surgical dressing, and has attained considerable popularity in America. According to *Fortschritt* the following formula gives a preparation closely resembling it:

Benzoic acid, Borax	āā 2 drachms
Boric acid	4 "
Thymol	¾ "
Eucalyptol	10 drops
Oil of wintergreen	10 "
Oil of peppermint	6 "
Oil of thyme	2 "
Rectified spirit	5¾ fl. oz.
Water to make	31 "

—*Chemist and Druggist*, June 30, 1888.

Surgery Under Difficulties.

The daily newspapers of July 10 contained an account of the bursting of a boiler in a mill at Allentown, Pa., by which a number of persons were killed and injured. Among the latter was a man whose body was pinned to the floor by a heavy mass of iron, so that it was necessary, in order to free him, to cut off his foot and the lower part of his leg. One of the physicians who were summoned to the assistance of the injured performed the difficult operation successfully, so far as the operation was concerned, although the man had suffered such internal injuries as make his recovery very improbable.

Transplantation of Skin.

At the meeting of the Cincinnati Medical Society, June 5, 1888, Dr. C. R. Holmes presented a case showing an excellent result in transplantation of skin. The patient was a young man, who showed upon his forehead and side of his face the scars which resulted from injuries, with subsequent ulceration and necrosis. The injuries occurred when he was eight and nine years of age. He had applied for relief from an ectropion of the right lower lid, one of the results of this ulceration. The operation was performed May 16. Preliminary to the operation the upper and lower eyelids were united at their outer third by three stitches. These stitches were to be allowed to remain for three months. In performing the operation he made an incision and dissected up the loose tissue, when he found that there was little, if anything, covering the bone. The space was filled with a transplantation from the arm. The doctor made a pattern of the part to be supplied, and, laying this upon the arm, cut a piece of skin away of the same shape, but he allowed about 75 per cent. outside of the pattern. This was afterward found to be a little too large, and about one-sixteenth of an inch was trimmed away. The size of the transplantation was about two inches one way by one the other. Warm moist applications were made to the part for ten hours. Afterward warm dry heat was applied for sixty hours longer. Not until three days ago was there any sign of the loosening of the horny layer of the skin.—*Cincinnati Lancet-Clinic*, June 30, 1888.

Mills School for Male Nurses.

On June 28, Mr. D. O. Mills formally transferred to the Board of Public Charities and Correction of New York a building erected at his expense and designed to accommodate fifty pupils of the training school for male nurses, in connection with Bellevue Hospital. The building is situated on the hospital grounds, and will serve in addition for the pathological museum of the hospital.

NEWS.

—Dr. S. B. Kello, of Ivor, Virginia, died July 10. He was graduated from the University of Pennsylvania in 1841.

—There were sixteen deaths from yellow fever and one from small-pox at Havana, Cuba, for the week ended July 14, 1888.

—Prince Louis Ferdinand, of Bavaria, has completed his studies, and has received a diploma qualifying him to practice as a physician.

—The number of cases of yellow fever at Plant City and Manatee, Florida, is diminishing. There have been no new cases for several days.

—The new Marine Biological Laboratory at Wood's Holl, Mass., was formally opened July 17. Dr. C. O. Whitman is the Director of the Laboratory.

—Dr. Hermann Knapp has been appointed Professor of Ophthalmology in the College of Physicians and Surgeons, New York, succeeding the late Dr. C. R. Agnew.

—Dr. G. B. Johnston has resigned the Professorship of Anatomy in the Medical College of Virginia, and Dr. Louis C. Bosher has been elected to fill the vacancy.

—A second Chair of Anatomy is to be established at the University of Jena, to which it is expected that Dr. C. Bardeleben,

Prosector and Professor Extraordinary, will be appointed.

—Dr. H. Fritsch, Professor of Midwifery and Gynecology at Breslau, has been invited to fill the same chair at the University of Würzburg, made vacant by the death of Scanzoni.

—Dr. Stephen G. De La Mater, of Duanesburgh, New York, died June 23. He was graduated from the Albany Medical College in 1842, and at the time of his death was the only surviving member of that class.

—The sanitary inspector of Santiago de Cuba, says the *Weekly Abstract of Sanitary Reports*, reports, for the week ended July 14, ten cases of yellow fever and nine deaths at the military hospital. The cases are of soldiers newly arrived from Spain.

—Dr. Frederick C. Perpente, of Philadelphia, who is charged with criminal malpractice which resulted in the death of Andora Troxell on July 17, was found on Thursday night in a swamp near Bayhead, Ocean County, New Jersey, and was brought to the city July 28.

—Mrs. L. R Mosier, an "electropathic physician," was held in $2000 bail at Fitchburg, Massachusetts, July 29, for causing the death of Miss Nellie Shea, by criminal malpractice. The arrest was the result of a sworn statement of the dying girl, accusing Mrs. Mosier.

—A public meeting will shortly be held in Paris to protest against the stringent police measures regarding stray dogs. These regulations, which absolutely prohibit any dog to be in the streets unless led, were instituted chiefly upon the recommendation of M. Pasteur, against whom a certain portion of the French press is carrying on a violent campaign.

HUMOR.

"What becomes of the old moons, pa?" "The old moons, my son? Why, they die of newmonia, to be sure."—*Lynn Item.*

A man recently undertook to ascertain the age of a shark by examining his teeth. The next morning the papers gave the man's age to the very day.—*Puck.*

"Darringer, have you a half-dollar that you don't want?" "Why, certainly. Here it is." The next day: "Say, Darringer, that half-dollar you gave me was a counterfeit." "Yes, Bromley. You asked me if I had a half-dollar that I didn't want."

Old Gentleman: "Strange! I don't see a grave of a person as old as I am." His daughter: "Why, of course not, father; you must remember this is a comparatively new graveyard."—*Life.*

It does not require anything extraordinary in the way of intellect to shoe a horse, but there is a fortune in store for the man who can shoo a fly so that the little pest will stay shod.—*Harper's Bazar.*

A Correct Diagnosis.—Young physician (inspecting citizen on the floor at the police-station)—"This man's condition is not due to drink. He has been drugged." Officer McGinnis—"You're right. I drug him all the way from Casey's saloon, two blocks down the street."—*Life.*

A Narrow Escape.—Mérimée, referring to M. Viennet, of the French Academy, observed: "We must not speak ill of his tragedies. At the siege of Leipsic he had one in his pocket. A cannon-ball ricocheted against his breast, but the tragedy saved him. The missile had not strength to go beyond the third act."—*Bristol Medico-Chirurgical Journal.*

Very Mortal.—A Bristol newspaper, one day last month, in giving an account of a recent death, of which the cause was at first doubtful, said that the doctor had "stated that death probably resulted from typhoid fever and autopsy." The editor will perhaps be sorry to hear that there is no record of a patient having recovered from the last-named complication.—*Bristol Medico-Chirurgical Journal.*

OBITUARY.

CHARLES M. KING, M.D.

Dr. Charles M. King, an old resident of Germantown, died July 18, in the seventy-fourth year of his age. He was born in Roxborough, and when quite a young man was apprenticed to a paper-manufacturer at Manayunk. Early in life he made several whaling voyages to the South Pacific Ocean, and in 1849 he joined a party and went to the newly-discovered gold-fields of California, his party being among the first to cross the Isthmus by the Nicaragua route. In San Francisco he became a builder, and erected a number of large warehouses. In 1852 he returned East and entered the Baltimore College of Dental Surgery, and, on graduating, settled in Germantown, where he practiced for a time, and continued to reside, until his death.

THE

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Clinical Lecture.

AORTIC REGURGITATION WITH ANEURISM OF THE SUBCLAVIAN ARTERY.—REMARKS ON ANEURISM OF THE AORTA.

BY JAMES TYSON, M.D.,

PHYSICIAN TO THE PHILADELPHIA HOSPITAL AND PROFESSOR OF GENERAL PATHOLOGY AND MORBID ANATOMY IN THE UNIVERSITY OF PENNSYLVANIA.

[Reported by William H. Morrison, M.D.]

Gentlemen: The patient before us is sixty-three years of age, and has no family history which bears upon his present disease. He had scarlet fever in early life, another fever, the name of which he does not remember, and later he had acute rheumatism, but otherwise he has been healthy. He denies having had syphilis, but admits that he has been a moderate drinker. He was admitted to the hospital, complaining of cough with expectoration of frothy mucus, with pain over the infra-axillary regions, and in the epigastrium. He was weak and exhausted, but had no subjective symptoms of disease of the blood-vessels. Physical examination, however, promptly discovered a very irregular heart and a murmur heard everywhere over the anterior portion of the thorax. His face was flushed and his breathing rapid. When I first saw him, the cough had been relieved, but auscultation easily recognized the murmur referred to. On superficial inspection of the chest, nothing unusual can be seen, but more careful examination discovers a pulsation just above the centre of the left clavicle. On close inspection, also, we notice a slight prominence in that situation. Placing my hand over the swelling, a distinct impulse is conveyed to it. These two signs—a *tumor* and an *impulse*—of themselves suggest aneurism, but there are other signs as easy of recognition. Thus there is impaired percussion-resonance over this area of usually clear percussion, and auscultation also gives us valuable signs. Placing the stethoscope over the apex of the heart, a murmur is discovered which is diastolic in time—that is, alternating with the first sound—a time when the auriculo-ventricular orifices are open and the aortic and pulmonary valves should be closed. Carrying the instrument toward the middle of the sternum, I observe that the murmur becomes louder and rougher, and louder still as the neighborhood of the aortic valves is reached. Finding this murmur at this place at our first examination, we made the diagnosis of aortic regurgitation, and thought it complete, whereas it was but partial. Placing the stethoscope over the tumor, I find the same murmur louder than at the apex, indeed quite as loud as at the base. I therefore conclude that the murmur heard over the apex of the heart is conducted from the aortic orifice, as it should be, with the regurgitating blood, but is conducted more loudly with the larger column toward the aneurismal sac. Again placing the stethoscope over the tumor, and listening a little more acutely, I find a second sound, less loud, alternating with the noisy one just described, the two sounds corresponding to the sounds of the heart. This fainter systolic sound is undoubtedly produced in the aneurismal sac, and is probably due to the blood passing over the roughened surface of the aneurismal wall. Sometimes these two sounds more closely resemble the normal

sounds of the heart, thus repeating them, as it were. More frequently but one is present—that corresponding with the first sound of the heart—than which it may be louder and more prolonged. In this instance, however, it is feebler while it is that corresponding to the second sound, which is louder, rougher, and more prolonged. This, however, has probably nothing to do with the aneurism, and is due to the aortic regurgitation; but this simulated duplication of the heart-sounds, an impulse, and the presence of a tumor constitute a triad of symptoms of aneurism unmistakable when present, while any one or all may be absent and any one simulated by some other condition. Take, for example, the murmur. In this particular case, the loudest factor of the aneurismal double sound is actually not aneurismal, but aortic in its origin. Again, a tumor may appear which is not due to aneurism; but such a mistake is less likely, because there is a great difference between a tumor due to aneurism and one dependent upon other causes, such as cancer, abscess, etc. Such a tumor is hard and unyielding, except sometimes in abscess, and non-pulsating, whereas in an aneurismal tumor the swelling is soft and there is a pulsation within the tumor. It is true that a tumor situated over a blood-vessel may exhibit an up-and-down movement due to the impulse communicated to it by the artery beneath; but such a pulsation differs from that of aneurism in that the tumor is raised *en masse*, while the aneurismal impulse is *expansile*.

A murmur or bruit is also often the result of pressure on a blood-vessel, but such a sound is apt to be soft in character, and such as you can yourself produce and hear by pressing upon the temporal artery as it runs in front of the ear. This murmur is very different in character from that produced by the vibration of the walls of the aneurism over which the blood flows. Finally, as has been said, an aneurism may exist without any murmur whatever.

Another very distinctive sign, which may also be absent, is the aneurismal thrill or tremor which is produced by the vibration of the walls of the aneurismal sac, and felt by the hands. It is noted in some cases with great ease, but is absent in this case. The thrill is a symptom which may come and go.

These are the signs of aneurism in almost any one of the great vessels. Others depend largely upon the locality, which let us seek to determine in the present instance. It has been seen that the pulsating tumor is above and behind the left clavicle, and in this location it can scarcely involve any other artery than the subclavian. If you will recall your anatomy, you will remember that the left subclavian is the third in order of vessels arising from the summit of the aortic arch. It ascends vertically to a distance equal to the innominate artery, and then curves outward to the left, between the anterior and middle scalene muscles, where it passes over the first rib, but under the clavicle, after which it becomes the axillary artery.

Among the most common symptoms of aneurism, in addition to those already noted, are those of pressure.

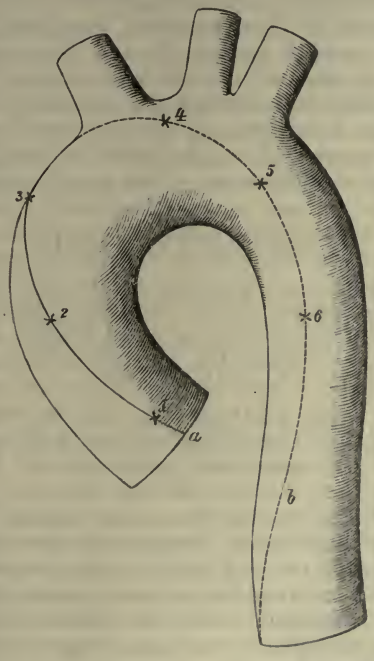
In this case of aneurism of the subclavian artery, we have no reason to look for encroachment, either upon the œsophagus, causing difficulty in swallowing, or upon the trachea, interfering with respiration, or upon the recurrent laryngeal nerve, causing alterations of the voice, or upon the vertebræ, or even upon the clavicle, although, when the subclavian aneurism becomes large, it may exert pressure upon the clavicle, give rise to great pain, and, in the course of time, to gradual erosion.

So, too, an aneurism may cause some alteration in the pulse, this varying with its situation. We should not look for any marked differences in the two radial pulses in this case, because the aneurism involves the subclavian, which, in its continuity, forms the radial artery. If it were an aneurism of the arch of the aorta, it might press upon the subclavian or the carotid artery, and in that way cause alteration in the pulse, so that a small pulse in the radial artery may be the result of aneurism of the arch of the aorta.

Passing again to the subject of aneurism of the aorta and of the great vessels of the neck, we find in the study of the former that there are certain sites which are more prone to dilatation than are others. These are the points against which the column of blood, as it passes from the heart into the aorta, impinges most strongly. As you know, the blood is sent through the aortic orifice by the ventricular systole with a sort of a twisting motion. As a result of this twist, there are different parts of the wall of the aorta which successively receive the force of the impulse. Thus, a spiral line of impingement is produced, beginning on the anterior face of the aorta and extending gradually around until its posterior face is reached. This is admirably shown in the accompanying diagram, from the sixth and

last (German) edition of Prof. Rindfleisch's excellent text-book of pathological histology. In this diagram, the solid black line is intended to indicate that part of the anterior face of the aorta which is thus impinged upon, while the dotted line is drawn on the posterior wall.

We observe that in the anterior line there are three situations, indicated by the numerals 1, 2, 3, at which aneurism of the arch of the aorta is most likely to make its appearance; and, knowing the direction of pressure in each instance, and reasoning backward from its effects, we are enabled to indicate the precise spots at which the aneurism began. Three points, indicated by the numerals 4, 5, and 6, are likewise found on the posterior surface. The first situation (*a* 1) is just above the aortic leaflets and in front of the origin of the pulmonary artery. An aneurism which starts at this point tends to drag upon the aortic orifice so that the lunulæ of the aortic valve are not able to completely close it, and consequently there is aortic insufficiency. In the case before us, the aneurism is too far away to produce such insufficiency. Further, as the tumor enlarges, it presses upon the pulmonary artery and interferes with the



passage of blood into the lungs. The right ventricle hypertrophies in its efforts to overcome this obstruction. To this sometimes succeed insufficiency of the tricuspid valve and venous pulse. When this aneurism ruptures, it empties for evident reasons into the pericardial sac, and is a not infrequent cause of sudden death in cases in which no disease had been suspected.

The second seat of aneurism (2) is more central in its situation and is the most frequent point of beginning of aneurism of the ascending aorta. The aneurism is immediately under the sternum and usually approaches the latter bone at the junction of the body with the handle. Continuing its progress in the direction of least resistance, it bores its way through the sternum, and finally the integument becomes its only covering. When rupture takes place, the blood escapes into the subcutaneous tissue, or the skin may rupture and the blood be discharged externally.

The third situation (3) is the antero-lateral wall of the convexity of the arch of the aorta, whence the aneurism pushes its way toward the apex of the right lung, which is the direction of least resistance. The firm bony bodies of the vertebræ resist its movement in the opposite direction, and it is forced up toward the apex of the lung. Consequently, we have first agglutination of the pleural surfaces by adhesive inflammation, and later rupture into the smaller bronchi of the right lung; whence the fatal hemorrhage is apt to be ushered in by hæmoptysis.

The next situation (4) is at a point midway between the innominate and left carotid arteries, whence the aneurism extends upward toward the trachea. Before reaching the size of a hen's egg, this aneurism, which usually has a constricted neck, perforates the trachea. Before this happens, however, the aneurism, by the pressure which it exerts, gives rise to tracheal symptoms and to alterations in the voice which in the earlier stages are often mistaken for those of laryngitis. When this aneurism ruptures, it is generally into the trachea.

Just beyond the left subclavian artery, between it and the isthmus of the aorta, in the descending limb of the arch, we find another position (5) in which aneurism occurs and is disposed to work its way posteriorly, and to the left toward the vertebræ. Not infrequently there is a cylindrical dilatation of the entire aorta anterior to the isthmus.

The remaining aneurisms of the descending arch all tend more or less to work backward, eroding the vertebræ, sometimes opening the spinal canal, and producing symptoms of paralysis. The above are the situations in which aneurisms of the aorta are

most likely to occur. The point of origin of the great vessels is often a seat of aneurism, for the reason that there is always some resistance where one vessel branches from the other, and this favors dilatation.

Why do aneurisms occur? What is there in the condition of the individual or of his blood-vessels which will tend to the production of aneurism? I do not believe that an aneurism can occur in a blood-vessel whose wall is perfectly healthy. For the production of aneurism, it is essential that there be some weakness in the vessel wall. This is occasionally the result of injury, but far more frequently is due to a fatty degeneration in the intima not always brought about in the same way. It is most frequently due to chronic endarteritis or chronic inflammation of the coats of the blood-vessel, and constitutes what is known as atheroma. Another cause is the so-called "fatty erosion," said to occur independent of inflammation. This is most frequently the starting-point of that variety of aneurism known as dissecting aneurism, where the blood, perforating the inner coat at a single point, dissects its way for some distance between the inner and outer coats. But by far the more frequent cause of aneurism is endarteritis, and the resulting atheroma. The causes of endarteritis are various. The most common is perhaps alcohol. Unquestionably blood loaded with alcohol is one of the most potent causes of this inflammation. Syphilis is another fruitful cause of chronic inflammation of the lining of the aorta. The habit of "free living," as it is called, is very prone to produce this condition. The poison of gout is another cause. It is possible that the defects in nutrition which always attend advancing age, and which come at different ages in different persons, may be sufficient to produce this fatty erosion, but they are not sufficient to produce endarteritis. Given these predisposing causes of aneurism, the impulse of the blood is by far the most usual exciting cause. In addition to this, there may be obstruction to the flow of the blood, which may contribute to the dilatation. Thus the pressure of a tumor on a blood-vessel, conjoined with an atheromatous condition, may lead to the production of aneurism. Whether or not, in the absence of any of the predisposing causes of aneurism, any obstruction is sufficient to produce the dilatation, is, as I have said, doubtful.

Treatment.—The question of practical importance is of course the management of a case of aneurism. I say freely that I have not been satisfied that any of the measures from time to time proposed, except surgical procedures, are of much service. Of remedies suggested, the iodide of potassium has perhaps the largest reputation and is most generally used. I have systematically and thoroughly tried it, but I have never been able to see that it does the least good. Electrolysis has been used by others with somewhat varied results, but I have never seen enough evidence to encourage me to make use of it. Compression in the case of vessels like the subclavian has been useful, either in curing the aneurism or temporarily preventing its extension. Surgical operations by ligation, either on one or the other side of the aneurism, are the most certain methods of cure, where an artery is accessible. Operation in aneurism of the aorta is of course impossible; but, in the innominate, carotid, and subclavian arteries, ligation has been used with success, and, where the immediate effect of the operation is not unfavorable, a cure may be expected. It may, however, happen that the blood-vessel is so atheromatous that it is disposed to reproduce the condition, and this point must be borne in mind in deciding whether or not an operation shall be performed. If there is atheroma, the operation will be likely to be a failure.

In those cases in which an operation is not possible, the treatment is that suitable for a case of heart-disease: quiet, rest, absence of excitement and exposure. Such a course will prolong the life of the patient and prevent the enlargement of the aneurism, which sooner or later must be fatal.

COMMUNICATIONS.

ANTIPYRIN, ANTIFEBRIN, AND PHENACETIN IN THE TREATMENT OF PULMONARY CONSUMPTION.

BY THOMAS J. MAYS, M.D.,
PROFESSOR OF DISEASES OF THE CHEST IN THE PHILADELPHIA POLYCLINIC.

Although these therapeutic agents have been but recently introduced to the profession, their range of usefulness already extends over a wide domain of practical medicine; and, although it is quite certain that in many instances their virtues are greatly overestimated, I think the practical results which will be offered in this paper show that if these substances are properly administered they form a most valuable and important addition to the therapeutics of pulmonary

consumption. In common with the practice of the day, I gave antipyrin for several years solely with a view of obtaining its febrifuge properties, and, while there can be no question regarding its power in this respect, more recent experience has taught me that this is not its only mission, and that it is a serious mistake to discontinue its use in cases of phthisis after the elevated temperature has been reduced very nearly or altogether to a normal point. Experimental research and the successful employment of these drugs in other diseases, notably in chorea, epilepsy, neuralgia, gout, and chronic rheumatism, which are unaccompanied by fever, point out that they possess an undoubted action on the nervous system, and their great utility in the treatment of phthisis is probably entirely due to the marked stimulating influence which they exert on this structure of the body. The remedial value of these agents is therefore not fully obtained unless they are continued after their use as antipyretics has ceased; for there is much reason for believing that the fever, the inflammation, the dyspnœa, the anorexia, and many other collateral processes in pulmonary phthisis are in a great measure dependent on disordered innervation, and that the remedy which controls the first-named symptom will also control the others. This distinction between the purely antipyretic action of these drugs and their power to counteract the other disorders is too important to be overlooked in the treatment of this disease. In my earlier observations on the clinical effects of antipyrin, I often noticed that, in giving it to phthisical patients with a high temperature and with a hopeless physical condition, the fever came down at once, and an improvement immediately followed in the accompanying conditions. I have notes of several cases, one of which I will briefly relate, in which the most surprising results occurred. A young woman, aged 19, with a large cavity in one apex and general destruction going on in the other lung, consulted me in June, 1885. I attended her, off and on, during that summer and autumn, without being able in the least to make an impression on the rapid progress of the disease, until the following October, when, at a loss what else to do, I prescribed ten grains of antipyrin, forenoon and afternoon. In spite of the small size of the dose, which was given in order to avoid the production of a serious collapse—a view which prevailed at that time—a complete transformation in her whole condition took place. Her fever came down, of course, but the cough and expectoration also became less, the night-sweats ceased, her appetite and general strength improved, and she felt better in every way. The disease had, however, already produced too serious inroads on her health to hold out much encouragement toward the prolongation of life, and she died the following December. The valuable lesson which this case should have taught me at the time was wholly overlooked, because I was imbued with the prevailing belief that, after the full antipyretic effect of antipyrin had been secured, it became a superfluous and perhaps a harmful agent, and would have to be discontinued.

So little impression did this case make on my mind as to the true and permanent remedial effect of antipyrin in phthisis, that I then failed to appreciate the import of a very interesting paper by Dr. J. Holland, of St. Moritz, Switzerland, which appeared in the *Practitioner*[1] about the same time, and in which he reports a series of cases of phthisis also treated with antipyrin; and evidently, like myself, administered the drug then only with a view of obtaining its febrifuge action, although, in the light of our present knowledge of its action, it is quite evident that it played a deeper rôle. His results were, however, so striking and in such perfect harmony with what I have since witnessed myself that I shall take the liberty of quoting the history of some of his most noted cases.

"*Case I* (Holland).—In last July (1884), I was consulted by a lady who was in advanced consumption. That morning, she had spat up about two teaspoonfuls of blood, and, on examining her chest, I found a cavity at the left apex, with extensive softening all around it; there was also softening at the right apex in front, but over a limited area; the cough was particularly troublesome, and appeared to be out of proportion to the amount of expectoration, although this was considerable. Her high temperature persisted and rose daily to about 102°; indeed, during the last week, it had on three occasions reached 103°, being highest from 4 to 6 P.M. Her temperature at my first visit was 103.2°. I advised total rest in bed, a light nutritious diet, a dose of Carlsbad salts the first thing in the morning, to be followed by ⅛ gr. morphine, and ⅛ gr. digitalis leaves every three hours. Next morning at 10.30, her temperature was 101.4°; in the evening, 103°. Instead of the digitalis, I now prescribed fifteen grains

[1] Antipyrin in Phthisis and other Febrile Disorders. Practitioner, vol. xxxiv, p. 521.

sodium salicylate every three hours. The night of the same day, her temperature again rose to 103.6°, and her cough was more troublesome. I now determined to try something else, and gave her twenty grains of antipyrin every three hours while awake, until three doses had been administered. The next afternoon, I saw her at the usual hour, and, directly I entered the room, I noticed how much better she looked. She told me she had taken the first dose of the antipyrin on the previous evening at 6 o'clock, and in less than an hour afterward she felt more comfortable and less feverish; at that time, she found her temperature 101.6°. At 9 P.M., just before taking the second powder, it was exactly 101°, and, at a quarter to eleven, 100.4°. She had slept well, only waking up when the cough troubled her, had eaten better, and altogether felt herself much better and more comfortable than she had done for weeks. The next evening, her temperature registered 100.4°. My patient complained of no disagreeable or unusual sensations. I could discover no altered physical signs in the chest, and there had been no evacuation of large quantities of expectoration, or anything else that could account for the fall of temperature, except the action of the drug itself.

"On the fifth day, she reported: 'Temperature at 9.30 last night, when I took another powder, exactly 100°, this morning at 9 A.M., 98.8°; at 2 P.M., when I took my first powder, it was 99°. Had a good night, cough and expectoration not so troublesome, no perspiration, taking more food, and feeling very much better.' During my visit on this day at 5 P.M., her temperature was 99.2°. I ordered another powder at 8.30 P.M., and two hours afterward the temperature was normal. Sixth day: Patient had a good night, cough and expectoration still diminishing, no perspirations, appetite and digestion good, spent two hours out of bed. Temperature 9 A.M., normal; 2 P.M., 98.8°, at 5 P.M. normal, and at 10 P.M. normal. Took a powder at 2 and at 6 P.M. Seventh day: Fairly good night, cough and expectoration a little more troublesome than the night before, but slept well on the whole; appetite and digestion good; no perspirations; spent four and a half hours out of bed. Temperature at 5 P.M., 99°; took a powder at 2 and 6 P.M. Eighth day: Temperature normal all day; took two powders. Ninth day: Same report. My patient continued the antipyrin twice a day for four days longer, and once daily for about a week afterward. During this period, she had only an occasional elevation of temperature, the highest registered being 100°. Her cough improved, the expectoration became less, and she was able to take carriage-exercise. In a month from the time I first saw her, she had gained three pounds in weight and she only coughed and expectorated in the mornings. The physical signs had improved in proportion, for the softening at the right apex had cleared up, and had conspicuously diminished around the cavity at the left side; the cavity itself showed signs of healing, and freer breathing was heard all over the left lung." He further states that this patient spent the following winter at St. Moritz, gained fifteen pounds in weight, temperature nearly normal since the previous August, became able to walk ten miles with very little fatigue, her appetite and digestion remaining excellent.

Case VI (Holland) (Abstract).—A woman with troublesome cough consulted him in July, 1884. She had a bad family history, and her chest showed moist sounds in both apices. Evening temperature, 100°. Prescribed bitter tonics for her, with antipyrin, and sitting outdoors all day long. She lost her fever at once and improved rapidly, both lungs drying up quickly. So far as he knew, she had no recurrence of the attack.

Since the publication of Dr. Holland's paper, several other antipyretics have been brought to the attention of the profession. Among the most valuable of these are antifebrin and phenacetin. The former is well known already, and the latter bids fair to become its successful rival. About a year ago, directly after its discovery was announced, I received a small quantity of phenacetin through the kindness of Mr. Merck, with which I made some clinical observations, the results of which were published in the *Medical News* for August 20, 1887, under the title of *The Effects of the Latest Febrifuge, Acetphenetidine*, as it was at first known. Altogether the drug acted very favorably, and I have at intervals continued its use since then. Its action is as decided as that of antipyrin and antifebrin, and it is said to be less liable to produce toxæmia. The first case in which I gave it was one of acute phthisis, with an afternoon temperature of 105.2°, which was preceded by a chill. She received three grains of the drug every three hours. The next afternoon she had another chill, and her temperature was 104°. The third day she

had no chill, and her afternoon temperature had sunk to 101°. The fourth day she had another chill, but her afternoon temperature only rose to 101.2°. The fifth day her temperature was down to 98°, and the phenacetin was discontinued. On the sixth she had no chill, but her temperature rose to 101° P.M. Seventh day: Chill, afternoon temperature 103.4°. Resumed the drug. Ninth day: Afternoon temperature 100.8°. Tenth day: Afternoon temperature 100.6°. At this point the supply of the drug became exhausted. The other case was one with an old cavity and a temperature in the evening of 102°. He received the same dose. Second day: Afternoon temperature 101.4°. Third and fourth days same, fifth day 100°. It was quite obvious, from even this limited experience with the drug, that it had a marked influence in depressing the temperature, and, beside this, it seemed to improve the cough, expectoration, appetite, and the general condition of the two patients. Subsequent use of the drug showed me that I gave it in too small doses in these cases. It is a valuable antipyretic, and, were it not for its expensiveness, which is even greater than that of antipyrin, it would soon become very popular; but, so long as the same results can be obtained by antipyrin, or by antifebrin, which is the cheapest of all the antipyretics, its consumption will probably be rather limited. I think, however, that in giving these agents it is a good plan to occasionally alternate one with the other. Very frequently one of them disagrees, as in the case of antipyrin, which sometimes produces urticaria, or as in that of antifebrin, which brings about lividity of the lips, gums, finger-nails, etc., and then it is very advisable to resort to phenacetin, which is believed to be free from evil consequences.

One thing must always be remembered in the administration of any of these agents, and that is that small doses, which are usually available in the reduction of the fevers of acute diseases, are practically useless in subduing the fever of chronic phthisis. Eight or ten grains of antifebrin and phenacetin, and twelve or fifteen grains of antipyrin every four hours, are small enough doses to begin with, and frequently they will have to be largely increased before the desired results are secured.

I shall now present the histories of a few cases of phthisis which were treated chiefly either with antipyrin, or antifebrin, or with both, in order to demonstrate the salutary influence of these drugs in this disease.

Case I.—W. T., man, aged twenty-three, was first seen March 27, 1888. He then had a cough which had lasted for some time, a profuse yellow-whitish expectoration, no hæmoptysis, was losing flesh (weight 109 pounds), appetite poor, tongue coated, had chills, fever, and night-sweats. His mother, father, and one sister died of phthisis. Physical signs, right lung: Tympanitic percussion-sound in apex, indicating a cavity extending to second intercostal space in front. Dulness from this point to base of lung in front, and from apex to base behind. Moist crackling over cavity, and crepitation and subcrepitation over the remaining portion of the lung anteriorly and posteriorly. Afternoon temperature 102.6°. March 28, afternoon temperature 104°; antifebrin, four grains every three hours, inhalation of 25 per cent. aqueous solution of ichthyol through respirator. April 3, cough less, temperature 101°; same treatment. April 9, temperature 104°; seven and a half grains of antipyrin every four hours with the ichthyol inhalations. April 20, P.M. temperature 102°; same treatment. May 7, P.M. temperature 100°, cough and expectoration very much less, night-sweats diminished, appetite very good, and his strength is improved. May 14, appetite good, P.M. temperature 102.5°; same treatment. May 28, P.M. temperature 101°. The antipyrin now produced its characteristic eruption, is discontinued, and ten grains of antifebrin every three hours are substituted. June 26, coughs and expectorates but very little, appetite very good, P.M. temperature 100°. July 6, feels very good, P.M. temperature 100.5°, weight 116 pounds; same treatment. Physical examination shows that the dulness in front from second intercostal space to base of lung had disappeared, and that the dulness behind had markedly diminished. No moist râles audible anywhere except some crackling over cavity-area. Cavity is much more dry than when first seen. His trade is an outdoor one, and he has been at it for some time.

Case II.—July 3, 1888, L., woman, aged 21, had pleuro-pneumonia two and a half years ago, has now a cough and yellow expectoration for six months, is losing flesh, poor appetite, night-sweats, and temperature of 104.25°. No family history of phthisis. Physical signs, left lung: Cavity in left apex; below cavity to base, exists an abundance of râles anteriorly and posteriorly. Right lung: Mucous râles over whole lung. Eleven and a quarter grains of antipyrin every four hours. July 7, she felt better,

appetite improving, and she had a temperature of 102.6°; twelve grains of antifebrin every four hours. July 10, temperature 101°; same dose of antifebrin every three hours. July 12, cough and expectoration much better, boil in left axilla, eats good, temperature 102°. July 14, feels better, temperature 101°; same treatment. July 16, appetite good, night-sweats less, temperature 99.5°. July 20, temperature 101.2°, appetite good. July 28, feels very good, eats well, temperature 98.5°. Temperature was taken only in the afternoon. Still under observation.

Case III.—Woman, aged thirty, was first seen May 8, 1888. She has been coughing for eight years, expectoration profuse and of a gray color, no hæmoptysis, but was losing flesh, had night-sweats, no appetite, irregular bowels, tongue coated, œdema of both insteps, temperature 104°, weight 90 pounds. Physical signs show a large cavity in upper third of right lung, with crepitation in extreme end of apex. Mucous râles from cavity down to base, anteriorly and posteriorly on same side. Crepitation at apex and base of right lung. Chest and whole body very much emaciated. She received seven and a half grains of antipyrin every four hours with ichthyol inhalations. May 12, her temperature was 101.25°, her cough was better, and expectoration had markedly diminished, the appetite improved, and she said she felt stronger. May 26, temperature 100°, felt very much better; antipyrin was increased to eleven and a quarter grains every four hours. June 5, temperature 99.8°, felt very good. June 8, temperature 101.5°; antipyrin was now increased to fifteen grains every three or four hours until up to the present writing, the temperature being generally 99° or 99.5°, only rising once to 101°. She is now and has been for some time able to take from one quart and a half to two quarts of milk, three-quarters of a pound of raw beef, an egg, and raw beef suppositories per day. The night-sweats are improved, the œdema of the feet has disappeared, and, although she has not gained much if any in weight, she looks and feels quite different. Some days she has taken as high as seventy grains of antipyrin, without producing more disturbance than a slight lividity of the lips and finger-nails, and a rash which appeared only during the last week. She was at once placed on eleven and a quarter grains of antifebrin every three hours. The beneficial effects of antipyrin became manifest directly after its first administration, and have certainly continued up to the present time. The temperature was taken in the afternoon.

Case IV.—P., man, aged thirty-five, came under my care June 21, 1888, with the following history: Well until last January, when he was taken with a chill, began to cough and expectorate yellow sputum, had slight hemorrhages, appetite poor, tongue coated, lost flesh, and afternoon temperature 101°. Two of his sisters died of consumption, aged sixteen and eighteen years respectively. Physical signs: No impaired percussion-resonance, sibilant and subcrepitant râles in both apices, and crepitation at bases of both lungs, marked especially in lateral and posterior areas. Beside these, there are distributed small areas of subcrepitation over different parts of both lungs, especially the left at the intersection of the sixth rib with the nipple-line. Treatment, six grains of antifebrin every three hours, inhalation of compressed and rarefied air, pulmonary gymnastics, a nutritious diet, and flaxseed poultices. The antifebrin in the course of a few weeks was increased to twelve grains every three hours, his temperature gradually sank, he improved in cough, appetite, and strength, and, on the 25th of July, when his afternoon temperature was normal and had been so for some time, his chest showed the following physical signs: Very few râles in right and none in left apex, few crepitations at base of left lung, chest-movements very much increased. In this time, he gained one pound and a half.

Case V.—C., man, aged thirty-four, consulted me May 9, 1888. Cough and expectoration since previous July, losing flesh, poor appetite, coated tongue, dyspnœa, and an afternoon temperature of 101°. Weight 110 pounds. Physical condition: Cavity in left apex, and mucous râles distributed over same lung; right lung normal, although whole chest is very flat and immobile. He was treated chiefly with antipyrin and pulmonary gymnastics. His temperature also came down, and he began to improve in every respect. On the third of July, he weighed 117½ pounds.

I could quote many other cases in support of the practical usefulness of these agents in the treatment of pulmonary consumption, but they would demonstrate no more than what has already been shown. I do not wish to convey the meaning that they are specifics, but I do mean to say that they are most important levers with which we are able to stay the fever, tone up the nervous system, improve nutrition, and compel the disease to give us time and opportunity to

feed the patient and to modify the local condition of the lungs by external applications, pulmonary gymnastics, physical exercise, etc.—most essential considerations in the therapy of this stubborn disease.

EPILEPSY DUE TO STENOSIS OF THE INTERNAL OS UTERI: OPERATION; CURE.

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That an earnest and exhaustive effort should be made in every case of epilepsy, to determine whether the affection is due to a central lesion, to an alteration of the blood, or to a peripheral irritation, is becoming better appreciated as the record of "reflex" cases is multiplied. The list of causative lesions is increasing, and it will continue to increase as greater thoroughness is used in the search for etiological factors. Attention has recently been called to a hitherto unsuspected possible cause of epilepsy and various other nervous disturbances, namely, insufficiencies of the ocular muscles.[1] It has been generally conceded that epilepsy in the female may be due to uterine or ovarian irritation, and, in fact, it has been so frequently and perhaps so improperly referred to this that a reaction has taken place, leading to the opposite error of ignoring such lesions as probable factors in causing epilepsy. Dr. Allen McLane Hamilton, writing of epilepsy, in the "System of Medicine by American Authors," says: "Reflex causes play a prominent part in many instances, though I am inclined to think that their importance has been greatly exaggerated. This is especially true of so-called uterine epilepsy." But he adds: "The fact that in some women we find *accès* at a period identical with menstruation points to a close relationship." A somewhat careful review of the literature of the subject shows only two reported cases in which epilepsy seemed to depend on conditions similar to those in the case whose history I shall give.

The first of these cases was reported by Dr. M. A. Pallen, in the *St. Louis Medical and Surgical Journal*, 1869, under the title of "Dysmenorrhœic Epilepsy and Sterility." In this case there was stenosis of the internal os uteri, for the correction of which the cervix was incised, and, after making a few alterative applications to the mucous membrane, to relieve an endometritis which had been produced by the anatomical defect, the dysmenorrhœa and epilepsy disappeared. The other case was reported in the Detroit *Lancet*, 1880, by Dr. J. H. Carstens, under the heading of "Epilepsy due to Uterine Stenosis." Here a girl, æt. 17 years, had menstruated regularly for three years, when, upon "catching cold," the menses suddenly stopped. Two months later, upon their reappearance, there was dysmenorrhœa with epileptic convulsions. These symptoms persisted through eight menstrual periods, when, upon the discovery of a constriction of the uterine canal at the internal os, rapid dilatation was performed, and the trouble disappeared for three months. At that time the patient was again under observation, having experienced pain and dizziness during the last menstrual epoch.

The following case shows a longer period of illness existing prior to operation, and exhibits a more satisfactory result—ten months having elapsed, during which time the patient has been entirely free of her former trouble.

Mrs. F., æt. 24 years, blonde, well developed, weight 130 pounds. Married five years, and sterile, although it is stated that, about six months after marriage, she miscarried at three months, after lifting heavy furniture. The patient came under my observation September 16, 1886. When first seen, she was in bed, unconscious, with flushed face and hot dry skin. There were twitchings of the muscles of the face and extremities, with an occasional tossing of the arms and clenching of the fists; also grinding of the teeth, but no biting of the tongue, nor decided frothing of the mouth. Occasional groans were uttered, as if the patient were conscious of severe pain. The respiration was not embarrassed. Temperature, 104.6° F.

Consciousness returned at intervals, to be succeeded by unconsciousness and the convulsive movements above described. This condition lasted for an hour, and was followed by a deep sleep, prior to which the patient said she felt much better and was relieved of the pain in the head, pelvis, and thighs. The following history was obtained: Attacks similar to and graver than the one described had been frequent during the past two years. They bore a close relationship to the menstrual molimen,

[1] Functional Nervous Diseases, by Dr. Geo. T. Stevens, of New York. Paper entitled "Graduated Tenotomy in the Treatment of Insufficiencies of the Ocular Muscles," by Dr. Charles H. Thomas, MEDICAL AND SURGICAL REPORTER, March, 1888.

occurring during the continuance of the discharge, or preceding or succeeding it by a period varying between one and four days. This attack occurred while she was menstruating, the discharge having appeared two days previously, and was accompanied with a slight chill and considerable pelvic distress. The following day, all untoward symptoms had disappeared, with the exception of a dull headache. The diagnosis was epilepsy, although the symptoms in this attack were not as sharply defined as they were on subsequent occasions. The pyrexia during an attack was never so marked afterward. Although a rise of temperature usually occurs during and after the second stage of such attacks, it is not generally so high as in this case. After the lapse of four months, the patient reported, with these additional symptoms: Severe headache, frequent micturition, dysmenorrhœa, obstinate constipation, and various nervous phenomena, including a complete change of disposition and marked failure of memory. Domestic duties, which formerly were performed with interest, now bore heavily upon her; social ties were disregarded, and her bearing toward those about her was noticeably altered. She remained in her room much of the time, and was disposed to melancholy. Previous to marriage, three years before, she considered herself perfectly well. There was no family history elicited which threw light upon the origin of her illness. She was inclined to trace it to the miscarriage. The dysmenorrhœa began after this mishap, but there was no suspicion of retained membranes, for there was neither menorrhagia nor metrorrhagia. Considerable pelvic inflammation doubtless attended this accident, for she was confined to bed for about four weeks subsequently. Menstruation was somewhat irregular afterward, recurring at intervals of from three to five weeks. Dysmenorrhœa was sometimes so severe as to require medical attendance. The character of the pain was indicative of an obstruction to the discharges—pain occurring at intervals, and being relieved by the escape of blood-clots, the pressure of which had probably distended the uterine canal. A vaginal examination revealed a small uterus, with a hard conical cervix, which was pointing in the direction of the vaginal outlet. The external os was rounded and small; the fundus anteflexed and pressing on the bladder. The introduction of the sound beyond the internal os was accomplished with difficulty. The condition was anteflexion and stenosis of the internal os uteri. Rapid dilatation of the canal of the uterus was advised, with a view to relieve the pain attendant upon the monthly sickness, rather than in hope of curing the epilepsy, which was steadily growing worse.

This measure was not carried into effect, however, until five months after its recommendation. During this interval, she had five attacks similar to the one described. They were centred around the menstrual nisus in the following manner: February, 1887, within five days after the cessation of the discharge; March, just at its close; April, on the first day of the flow; May, four days previous to the appearance of the discharge. Fifteen days afterward, she had a severe epileptic seizure while visiting a relative. This was the fifth grave attack, in addition to the monthly convulsive derangements, during a period of two years. This characteristic seizure, which exhibited all the well-known features of epilepsia gravior, did not occur sufficiently near the menstrual period to suggest a relation with that function, but two subsequent like attacks were experienced coincidently with menstruation. The monthly disturbance, which had recurred so regularly, was of the same nature as these more severe manifestations, differing only in degree. Of the latter, there were only seven attacks, while the former were experienced monthly for nearly two years, and were gradually developing into the graver form, their periodicity implying a close relationship between them and a perversion of the menstrual function. The uterine lesion explained the difficulty in menstruating, and its correction was followed by cessation of the convulsions, which were thus proved to have been simply reflex manifestations of uterine irritation.

On June 6, 1887, Dr. William L. Taylor dilated the canal of the uterus to 1¼ inches. Seven days after the operation, the menses appeared, and were so painless that she was not aware of her condition, except by the external appearance. Unfortunately, she did not remain in bed, as directed, but, feeling so comfortable, was imprudent enough to pay a visit, on the last day of menstruation, to a friend living at a considerable distance, and on her way home was overtaken by a thunder-storm, which she hurried to escape. This exertion, so soon after the operation, and just when the uterus and its appendages were especially susceptible, proved sufficient to provoke another fit. When only a square away from her home, she dropped to the ground in an unmistakable epileptic con-

vulsion. Successive convulsions occurred for about two hours. During a lucid interval, she mentioned the writer's name as her medical adviser, but, before she could give any information which would throw light upon her identity, she relapsed into unconsciousness and convulsive movements. It was after midnight when I saw her in the saloon to which she had been carried. She was removed to her home in a large rocking-chair, and soon afterward fell into a profound sleep, which lasted well into the morning and left her with a dull headache the following day. During the month of July, she was out of town, and, though she suffered some sharp pains while menstruating, they were not like those formerly experienced.

Upon returning to the city the following month, her general health appeared much improved, and it was chiefly this feeling of returning health that led to many indiscretions which retarded her recovery. During this month, she repeated the misfortune of June—by over-exertion during menstruation. The flow had begun without any pain, and she felt so well that much care seemed unnecessary. While walking along the street, she suddenly recognized an aura, and had time to ring the bell of a house and gain admittance just as she was seized with a convulsion. This was the most severe, and the last, epileptic attack which she has had. She was removed to her home on a stretcher furnished by the police department, and had several milder convulsions afterward, although a period of over two hours had passed since the beginning of the attack. As usual, a profound sleep succeeded, and left her quite well, excepting a feeling of heaviness the next day.

The cause of these two invasions of epilepsy after the operation was undoubtedly uterine irritation. This, however, was not due to any obstruction in the uterine canal, but to an excitation of the nerve-structures of the uterus and ovaries, inducing too great a flow of blood to the parts which had been rendered, for a time, hypersensitive by the operation. Had she remained in bed until after the congestion attendant upon the catamenia had entirely subsided, it is reasonable to suppose that she would have escaped the seizures. There is, necessarily, some congestion of the uterus and neighboring structures resulting from rapid dilatation of the uterine canal, and therefore it is natural to anticipate that the menstrual period immediately succeeding the operation will be possibly more painful than usual. The ovaries—one or both—are sometimes involved to such an extent that they undergo hypertrophic changes and become swollen and tender. It is evident, therefore, that the patient erred in making such exertion before the pelvic organs had recovered their normal circulatory and nervous equilibrium. During the following menstrual period, greater attention was paid to bodily rest, and not the slightest trouble was experienced. Instead of dysmenorrhœa and epileptic paroxysms, there were painless menstruation and perfect composure of body and mind.

Ten months have now elapsed since the last convulsion occurred, during which time she has improved in every respect. With the correction of the uterine defect, all the abnormal conditions—dysmenorrhœa, frequent micturition, epilepsy, headache, failure of memory, irritability, melancholy, and other symptoms expressing a general decline of health, have disappeared, and she now considers herself in perfect health.

The deduction to be made from the history is apparent: The epilepsy and accompanying derangements were due to constriction of the internal os uteri. This stenosis was a barrier to the free escape of discharges at the catamenia. The consequent engorgement irritated the nerve-supply and this peripheral irritation was transmitted to the central nervous system and manifested itself in epileptic paroxysms. While it is true that the bromides were administered at various times during the course of treatment, they were not relied upon for curative effects, and were not pushed for specific action. Indeed, they were first given to relieve the headache from which the patient suffered. General tonic and alterative remedies—iron, quinine, strychnine, arsenic, were prescribed for about six weeks early in the course, and nitrite of amyl was ordered to be inhaled in the event of an aura occurring. But, when the warning came, the vial was never at hand. The drugs thus administered can therefore scarcely be included as curative agents. This is apparently a case in which epilepsy originated and persisted because of a definite uterine lesion, the relief of which was followed by cure. It is not unreasonable to hope that in the future many cases of so-called idiopathic epilepsy may be recognized as reflex manifestations of ascertainable causes. Therefore, as the causes of epilepsy are almost as numerous as its victims, it behooves us to interrogate every organ and correct every abnormality which could possibly play the part of an irritant.

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HEALING OF WOUNDS IN HIGH ALTITUDES.

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It has probably not escaped the notice of the observant surgeon residing in the high places of the Rocky Mountains, how quickly and kindly the healing of all wounds takes place, and often under the most unfavorable circumstances. To me, this fact has presented a striking contrast with my experience east of the Mississippi River. My observation has extended over eight years of continuous practice in several localities of the Rocky Mountains in the Territories of New Mexico and Arizona, three years of this time in the capacity of a railway surgeon. The majority of wounds treated, however, have been gunshot wounds, including many of a miscellaneous character, and in localities from 2000 to 7000 feet above sea-level. Excepting a few cases of railway injury where the shock was great, the so-called capital operations resulted as favorably under the same conditions as did the minor surgical cases.

In this frontier country, men become accustomed to hardships and dangers, so that wounds that would be considered of a serious nature East are considered as trifles here; and often, when the sufferer would consult a surgeon, the distance or his isolation prevents it. Many a brave man, having been wounded by accident or otherwise, is taken to the rude camp of a kind friend, and then, under the care of unskilled comrades and the assistance of nature's antiseptic, he survives wounds to which, under circumstances apparently more favorable, he would have succumbed.

The aborigines, many of whom are the personification of filth, dress their wounds with dirty greasy rags, or bathe them in dirty water, and yet their wounds seem to heal as kindly as if treated antiseptically. These are stubborn facts to the enthusiastic advocate of the germ theories, but they are matters of frequent occurrence in this country.

My observations have not been confined to men alone. I have frequently been called upon to act in the capacity of a veterinary surgeon, and in the lower animals. I have noted the healing of wounds in a remarkable manner.

The conditions and surroundings under which the surgeon operates are often as unfavorable as those of the sufferer after the operation or injury.

Through necessity, the dressing of wounds and operations is sometimes performed in the field (outdoors), in the cabin of the miner, the hut of the ranchman, the Mexican adobe, an Indian "wickiup," a box-car, freight-house, or a dugout.

I need record but a few cases to illustrate the rapid manner in which wounds heal.

Case I.—D. H., aged 40 years, Mexican, miner, was injured by having a bucket of rock spilled upon his head while working in the bottom of a shaft. I saw the patient about 8 hours after he had received the injury; he was rational, had three large scalp-wounds and other bruises. I removed the hair from the region of wounds, washed them in spring-water, directed cold compresses, gave calomel grs. x, and left orders for the patient to be removed twenty miles, to town. I had discovered, as I thought, a fracture of the cranium, but did not ascertain its extent. The patient was lashed on a burro, and, with a comrade on each side, conveyed across the mountain 6 miles, from whence he was conveyed in a buckboard. He arrived about 24 hours after my first visit, and on examining his head I found the edges of the wounds quite firmly adhered by fresh granulations. I was greatly surprised at the rapidity of the reparative process, and used no little force to open the one over the seat of fracture. On further investigation, I found a marked indentation of the left parietal bone, at the margin of the coronal suture, about midway between the sagittal and squamous sutures. The extent of the fracture was small, and, as there were no signs of compression and no loose pieces of bone, I closed the wounds with adhesive straps and dressed them with hydronaphtholated olive oil. Patient complained of headache and restlessness; gave potass. bromide and chloral hydrate; relief followed, and in two days the patient left his room and walked next door to meals. In five days more, he returned to the mine, and went to work soon afterward. I ceased the daily dressing of the wounds April 1.

The fracture spoken of was very distinct, but may have been only of the outer plate. It seemed to have been made by the corner of a very sharp hard rock.

July 2, 1888. Saw this patient to-day for the first time since. He has been well, and worked steadily. There is still some depression in the cranium over the cicatrix, where the fracture occurred.

Case II.—I. C., aged 33, farmer, October 3, 1885, had his left arm caught in the machinery of a thresher. Primary amputa-

tion of arm above elbow. No antiseptics used, but otherwise dressed in ordinary manner. Patient progressed satisfactorily; stump healed in 21 days, and patient left bed. In 28 days, he resumed work with the thresher.

Case III.—R. M., age 23, car-repairer, was cut with razor in a drunken brawl. Wound below thyroid cartilage; a straight smooth cut, about five inches long, and extending across the front and lower part of the neck and through the skin and cellular tissues. Trachea was exposed, but uninjured. I was near the patient when he received the wound, and dressed it one hour afterward. Closed wound with twelve interrupted silk sutures. The patient resumed his spree, and, on the second day after the receipt of the injury, he resumed work. The wound was never dressed but the one time, and the patient wore a soiled silk handkerchief around his neck, which constituted the dressing. On the fourth day after receipt of the injury, he came to me to remove the stitches. The wound was completely healed, apparently by first intention.

I know of several instances in which men, desperately wounded, have fled from justice, taking refuge in open camps in the mountains, where, without medical or surgical aid, they recovered. I have seen operations performed in the most unscientific manner where perfect recovery followed, and men have acquired local reputations as surgeons who are shamefully illiterate and unskilled.

I have witnessed but one case of surgical septicæmia, and that in a case in which I had ligated the radial artery for a gun-shot wound of the deep palmar arch. The patient was considerably anæmic from frequent and repeated losses of blood. He afterward made a good recovery. I believe, also, that puerperal septicæmia is rare. I might add more cases in support of what I believe to be the reason of this rapid healing of wounds in these localities. I believe that, by certain natural conditions of our atmosphere, it is rendered to some extent antiseptic, or at least unfavorable to the existence and development of bacteria and other septic germs. It is a fact well known that fresh meat, cut and dried in the hot sun, cures without becoming tainted. This "jerked" meat enters largely into the summer diet of many of the inhabitants of this country who live away from the markets. It is said that the spores of the microbe are so universally distributed through air, earth, and water, that their exclusion from the human body is almost impossible. Moisture and warmth are conditions favorable to their growth and development. They require a moist surrounding in order to multiply, and, after removal of these conditions which favor their growth, their spores are carried through the atmosphere and thus contaminate the human body. Beale says (Microscope in Medicine) in a dry atmosphere the living bacterium would soon shrivel up and its life would be destroyed, it, as a living body, containing a large amount of water. On the other hand, the germs of bacteria may exist in countless multitudes in the atmosphere, and these under favorable circumstances will germinate and the resulting bacteria grow and multiply. Further, we know that a moist medium is required for the culture of these microbes and bacteria.

In these elevated regions the atmosphere is extremely dry, and this furnishes an unfavorable soil for the existence or development of such germs. The earth in these localities is also warm and very dry. There are probably not more than ten days in a year in which the ground is continually moist; in fact, we have dust about all the year, and we are frequently reminded of that fact by the violent winds that carry it into our houses and everywhere. If it is possible for the spores of these microbes to exist in our atmosphere, I believe our constant currents of air and our frequent winds are sufficient to drive them over our vast areas of mountains and valleys, and they are thus deposited in a barren soil. I have seen wounds, both in the human and the lower animals, heal under the most filthy conditions; and, if the bacteriologist could but get a look or a smell at one of our native Indian camps, he would stand in amazement when told that *their* wounds heal favorably under such conditions and habits. There is, beyond a doubt, something in our climate that is favorable to the healing of wounds, and I believe it to be our dry rare atmosphere, our dewless cold nights, our perpetual sunshine, and the constant currents of air which pass through our mountains and valleys. I am trying to solve some of these problems with the aid of the microscope, and hope to succeed.

—A man named Johnson, of Providence, recently swallowed sufficient strychnine to kill 200 men, after which he informed his wife of his action. She hurriedly emptied the contents of a can of kerosene down his throat and then summoned a physician. The latter thinks Johnson will recover.

SUGGESTION AND EXPECTANCY.

BY WILLIAM M. CAPP, M.D.,
PHILADELPHIA.

In an article by Dr. Dewees, on Amenorrhœa, etc., in THE MEDICAL AND SURGICAL REPORTER of June 30, 1888, he speaks of the ecbolic effects of manganese in two cases which he details. In seeking to account for the action of the drug in these two cases, he overlooks the most important considerations of all—namely, those which just now are occupying the minds of many of the French faculty—suggestion and expectancy. The patients applied to him with a well-formed but concealed purpose, representing, however, that they sought simply for a restoration of the catamenia (under proper circumstances, as they alleged). They believed that he could accomplish it, were determined upon having it, and probably covertly assisted in its production. They knew enough to see that their ulterior object would be gained if their ostensible object were accomplished. Here was a chance for the exercise of the force of mind over matter, of a most favorable kind, and the expected effect was accomplished presumably to the patient's satisfaction. The doctor, however, played only a subordinate part. He did nothing consciously or directly to produce the effect obtained; indirectly, however, and unconsciously, he inspired the patients to believe that his management in the matter would result as they suggested to themselves, expected, and fully determined that it should. Hence the result narrated, which was not from the physiological action of the drug used.

Recently a case somewhat similar in its main features came under the writer's observation. An unmarried woman below the age of twenty came under care for a hemorrhage. A little investigation showed it to be the sequel to an abortion. She frankly enough did not claim to have been deceived, since she had followed her own inclinations. She had applied to a physician much older than herself, in a matter of sort way, stated the condition of things without reserve, and asked relief. Her manner and conversation implied that she thought she was doing no unusual thing. She stated that he appeared to sympathize with her in her trouble, and gave her a prescription for pills which would "*make it all right.*" In a few days, after some little pain, a fœtus of about two months came away, hence the hemorrhage on account of which application was made on her behalf to the dispensary for a doctor's aid. Care was taken to look the matter up, and it was found that the physician had given a placebo with the assurance as stated, and in the drug-store the recipe on file showed that the pills contained simply a small amount of sulphate of cinchona. The dose was, of course, inert for such a purpose. The girl was a simple-minded creature of defective training and loose surroundings, and appeared to be unconscious of having done differently from others. But she had implicit faith in the physician, who, she thought, had promised to aid her to accomplish a certain purpose, and a full expectation and determination that it should be accomplished. A careful inquiry seemed fairly to place the case in the list of those properly known as effects of mind over the body.

1715 Spruce St.

GALVANO-CAUTERY ELECTRODES.

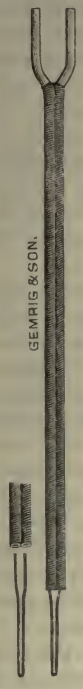
BALDWIN GLEASON, M.D.,
PHILADELPHIA.

A few weeks ago, my attention was attracted by an article in the *Medical News*, by a Dakota physician, describing how a practical galvanic battery might be made at a cost of five dollars. Galvano-cautery knives that will be more useful than any to be had in the market can also be made at home at a trifling expense.

Select copper wire of sufficient diameter (No. 14 will do) so that it will not heat during the passage of the electric current, yet not so large as to take up too much room when the electrode is used through a nasal speculum. Cut the wire into lengths of about six inches. Get a jeweler to drill a hole in one end of each length, for the reception of the platinum loop, and bend the other end so that, when two lengths are bound together with silk, they will fit into the handle of the electrode. Such copper wires, already drilled and bent, can be bought at surgical instrument stores in this city for fifty cents a pair. Holding a pair of such wires by their drilled ends, bind them firmly together by figure-of-eight turns of ordinary black button-hole silk, being careful that each turn lies smooth and tight on and between the wires before the next is put on. When the bent ends of the wires are reached, fasten the ends of the silk by a few half-hitches. The copper wires are now ready to receive the platinum tip. Buy, at any dental supply store, some

platinum wire. This should not be too thick, or it will not heat up readily, not having sufficient resistance; nor too thin, as in that case it will bend when you attempt to press it into the tissues. No. 22 is the size generally used. Bend a piece one and a half inches long sharply upon itself, and insert the ends into the holes drilled in the copper wires. Clamp the copper firmly on the platinum with pliers, and your cautery-knife is made.

Most of the cautery-knives for sale have the platinum soldered to the copper. This a disadvantage, as they easily break at that point, necessitating frequent resoldering. Clamping the copper about the platinum



does away with this disadvantage, while a few strokes with a file make a smooth joint. A coat of shellac varnish may be put upon the silk covering the copper wires, to improve the appearance of the electrode. Before attaching the platinum loop to the copper, it may be made to assume any desired shape by a few blows from a hammer. An ordinary tack-hammer and flat-iron will answer the purpose of hammer and anvil, if one has nothing better at hand. A very convenient electrode for anterior hypertrophies in the nose is made by hammering one side of the bent platinum wire flat and leaving the other round. Hammering increases the resistance; so that the flat side of the wire will heat up more quickly than the round, and there is no danger of singeing the septum when such a knife is used. When it is desired to make a puncture rather than a cut, or cut only with the point of the knife, the platinum wire should be left nearly round, and only the very end or bent portion hammered. Then only the very end may be made red-hot. Such electrodes are convenient for cauterizing the middle turbinated bones or hypertrophied tonsils.

Galvano-cautery knives, such as described, are used in the Nose and Throat Dispensary of the University Hospital and in the private practice of Dr. Carl Seiler, by whom they were devised, and also in my own. A physician can make them with platinum tips of many shapes and sizes, that will heat up at the exact part desired, and will find them more practical than those for sale, while their cost in money is almost nothing.

1346 Spruce Street.

Society Reports.

AMERICAN OTOLOGICAL SOCIETY.

TWENTY-FIRST ANNUAL MEETING, AT NEW LONDON, CONN., JULY 17, 1888.

MORNING SESSION.

The Society was called to order by the President, Dr. J. S. Prout, Brooklyn, who alluded in his opening address to the loss sustained by the Society in the death of Dr. C. R. Agnew, of New York, and suggested that action be taken.

On motion, Dr. Gorham Bacon and Dr. W. H. Carmalt were appointed to prepare an appropriate minute on the subject.

Drs. Green, Theobald, and Carmalt were appointed as the Business Committee.

Dr. E. Williams, of Cincinnati, on account of failing health, presented his resignation. This was accepted, and, on motion of Dr. Carmalt, the by-laws were suspended, and Dr. E. Williams was elected an honorary member of the Society.

Dr. W. H. Carmalt presented the report of the Committee of Conference on the Congress of American Physicians and Surgeons.

The report was accepted, and it was decided that, when the Society adjourns, it adjourn to meet at the Arlington Hotel, Washington, D. C., September 18, 1888, at 11 A.M.

On motion of Dr. Green, it was decided that the meeting should be strictly for scientific matters, and should not be regarded as

a business meeting, and that it should not take the place of the annual meeting.

The reading of papers was then taken up. Dr. S. Sexton, New York, read by title a paper on

Periostitis Externa of the Mastoid

and one on

Some of the Indications for Excision of the Drumhead and Malleus.

Dr. C. H. Burnett, of Philadelphia, read a paper on a

Case of Aural Vertigo (Menière's disease)

which was relieved by excision of the membrana tympani and malleus.

The patient was a young unmarried woman, 37 years of age, who six years previous had been under treatment for chronic naso-pharyngeal catarrh and chronic catarrh of the left middle ear, accompanied with difficulty of hearing, tinnitus aurium, and a sense of fulness in the affected organ. Treatment of the catarrhal disease of the ear produced no benefit. After the lapse of six years, the symptoms already named grew worse, and there was superadded marked aural vertigo. The membrana tympani in the line of the malleus-handle was found adherent to the promontory, and the consequent retraction of the entire chain of bones was held to be the cause of the aural vertigo and of the sense of fulness and of the tinnitus.

The operation of excision of the membrana tympani and the malleus was performed under ether May 21 last, with entire and immediate relief to the aural vertigo (which before had often been sufficient to cause the patient to hold to a lamp-post for support), and to the sense of pressure and tinnitus, which good result has been maintained to the present time. The hearing was practically unaffected by the operation. The incus was detached from the stapes, but could not be removed, as it slipped into the attic, and grappling for it is not advisable on account of the risk of irritation. Its removal, furthermore, would have no effect in the result of the operation.

Dr. J. O. Tansley, New York, in opening the discussion, said: I have now under my observation a girl on whom this operation was performed some eighteen months ago. When she came to me, the whole internal canal was filled with polypi, and she presented serious brain-symptoms. I took out all the polypi and found a portion of the drum remaining, and above a localized necrosis, into which a probe passed at least one-fourth of an inch. The patient has been under observation every day for two months. The local necrosis is healed and she is doing well. There are still some brain-symptoms. It seems to me that this is a very serious operation, and I should hesitate some time before performing it. In this case the result seems directly traceable to the operation.

Dr. C. H. Burnett, Philadelphia: My patient did not remain in Philadelphia, but I was informed that, two or three weeks after I saw her, a discharge appeared. I think that there is still a slight discharge, but the membrane is forming. In another case a slight discharge appeared soon after the operation, but ceased after the membrane had reformed. The case reported by the last speaker was not one of the class to which I have alluded. The operation was evidently not properly performed, if there remained a portion of the membrane and there was necrosis. I have not found this a dangerous operation. No one has reported bad results from this operation, properly performed.

Dr. Chas. J. Kipp, Newark: This operation has been performed a number of times by a foreign operator for the relief of tinnitus and vertigo, but he has given it up because it did not relieve these symptoms satisfactorily. He, however, did not have any bad results.

Dr. S. Sexton, New York: I have performed this operation between fifty and one hundred times in the past few years, and have obtained decided benefit in a number of cases of tinnitus and other subjective symptoms. I have known of no case in which there was aggravation. In many cases where there has been no marked tinnitus, the distressing sense of pressure has been overcome. The tinnitus is not always relieved by the operation. Dr. Burnett has referred to the closure of the drumhead. My principal endeavor has been to avoid reformation of the drum membrane. In a number of cases where this occurs the good hearing is lost. I have prevented this by the application of a solution of salicylic acid in ether to the margin of the closing membrane. This has succeeded even where the membrane has closed down to a minute opening. In regard to the purulent case to which allusion has been made, I have operated on a number, and, on the whole, they are the more satisfactory cases.

Dr. B. Alex. Randall, of Philadelphia, was invited to take part in the discussions of

the Society. He said: It may be that in Dr. Tansley's case the operation was done for the necrosis. The presence of polypi of the size referred to indicates great neglect, and the results are more probably attributable to this neglect than to the operation.

Dr. A. H. Buck, of New York, read a paper on

Reflex Influences in the Production of Naso-Pharyngeal Catarrh.

The object of the paper was to call attention to those comparatively remote exciting causes of naso-pharyngeal catarrh which act, so far as it is possible to explain their mechanism, through the intervention of the vaso-motor fibres of the sympathetic nerve. We know, he said, little of the direct exciting causes of naso-pharyngeal catarrh. The most common indirect cause is chilling of the surface of the body. According to certain authorities, affections of the teeth should rank next in order of frequency. The author had, however, seen very few cases in which dental disturbance played the part of a promoter of naso-pharyngeal catarrh or of aural disturbance. Some of those indirect causes which he had observed were then enumerated. Irritation of the gastro-intestinal canal is, in not a few instances, a strong exciting cause of naso-pharyngeal catarrh and of all the aural disturbances growing out of such a catarrh. A man, 45 years of age, had for years been more or less a sufferer from naso-pharyngeal catarrh, with tinnitus aurium and slight impairment of hearing; and, more recently, he had begun to suffer from feeble digestion. He noticed that after indulgence in certain articles there would be abdominal discomfort, and, at the same time, marked exacerbation of the naso-pharyngeal catarrh. So long as the offending substance was in the stomach, there was only a slight sense of discomfort; but, in the course of three or four hours, a slightly painful peristaltic movement would set up in the bowels, simultaneously the secretion from the vault of the pharynx would become unpleasantly active, and the tinnitus would increase. This condition would last for an hour, and then the naso-pharyngeal catarrh would return to its usual state. These attacks were accompanied with the escape of large quantities of gas by eructation. In many patients, usually men between 40 and 60 years of age, when we have reason to believe that the gastro-intestinal tract is habitually in a state of greater or less irritation, we find the faucial mucous membrane red and swollen. In these cases the disease which claims chief attention is the gastro-intestinal affection.

Reflex influence involving the vault of the pharynx and the ear may emanate from more distant sources. A woman, 40 years of age, complained of distressing tinnitus involving both ears. There had been mild naso-pharyngeal catarrh, from time to time, for many years. At times she was almost entirely free from tinnitus. I always, he said, succeeded in giving prompt relief by applying a moderately strong solution of silver nitrate, with a mop of absorbent cotton, to the vault of the pharynx. After a time these failed to give relief. It was then learned that for many years she had suffered with pain in the pelvic regions and back, and that at this particular time she was suffering in a more marked degree. A specialist was then consulted, and it was found that there were retroversion of the uterus and subacute parametritis. These conditions were removed and the tinnitus disappeared without treatment to the vault of the pharynx.

The author stated that he had spoken of these as indirect causes—that is, as factors competent to aggravate a pre-existing but perhaps latent catarrhal disease; but he saw no reason why these reflex influences might not in certain cases play the part of direct exciting causes. He considered it impossible to demonstrate the correctness of this belief, and therefore preferred to adopt the view which assigns to them a less independent *rôle*.

Dr. J. O. Tansley, New York, in opening the discussion, said: I meet with many cases of naso-pharyngeal catarrh in young girls, 15 to 20 years of age, who are decidedly anæmic and chlorotic, and who suffer with constipation. I have found that the latter is the cause of the catarrhal symptoms.

Dr. S. D. Risley, Philadelphia: It is pretty generally admitted that nasal and pharyngeal diseases are especially liable to occur in persons of a gouty diathesis. Naso-pharyngeal disease is one of the most uniform manifestations of lithæmia. In regard to the symptoms detailed in the first case of Dr. Buck, I should suggest that the digestive disturbance was probably associated with a lithæmic condition.

Dr. C. H. Burnett, Philadelphia: I have seen a number of cases of tinnitus without deafness, due entirely to dyspepsia. The use of nitrate of silver has been referred to. While this may be of service in other locations, I think that it is the worst application that can be made to the nose or the naso-pharynx. Its use will be followed

sooner or later by sclerosis and atrophy. It will apparently cure a hypertrophic catarrh, but the case comes to the rhinologist later, with a marked atrophic process in the mucous membrane. I have entirely abandoned the use of nitrate of silver in affections of the nares.

Dr. S. Sexton, New York: I have seen many cases in which irritation in the mouth has been the cause of naso-pharyngeal catarrh and aural symptoms. A woman was brought to me with intense pain in the ear and the head. There was nothing in the condition of the ear to account for these symptoms. Examination of the mouth showed that she was wearing a plate to bring the teeth closer together. The gum was intensely inflamed, although the patient complained of no discomfort. The removal of the plate caused a disappearance of the pain in the ear and head. I have seen many such cases.

Dr. J. O. Tansley, New York: I have seen many cases in which irritation of the teeth caused aural symptoms. I agree with Dr. Burnett that nitrate of silver should not be used in the nasal cavity. I have not made such an application for a number of years. There is in catarrh an increased thickening of the basement membrane; this tends to contraction, and the tendency to contraction is increased by the use of nitrate of silver. I employ such agents as induce an exosmosis.

Dr. J. F. Noyes, Detroit: This paper brings up the fact that it is important that in our special practice we should consider general practice. I have always recognized these so-called reflex causes, and have treated cases by searching out these causes. A remarkable case came under my notice, in which a woman after confinement developed naso-pharyngeal catarrh. There was profuse secretion. The trouble continued for a year in spite of treatment. Finally she passed into the hands of a gynecologist. The cause was then discovered, and treatment of the uterine disease cured the naso-pharyngeal disease.

Dr. Samuel Theobald, Baltimore: I think that where atrophy follows hypertrophic catarrh it is the result not of the application of nitrate of silver, but of the the continuance of the catarrh. I question whether solution of nitrate of silver, ten to fifteen grains to the ounce, will produce sloughing. I regard this agent as a valuable application in disease of the nasal membrane.

Dr. Chas. J. Kipp, Newark: I agree with Dr. Theobald as to the value of nitrate of silver. I rarely use it in a stronger solution than twenty grains to the ounce, and neutralize it afterward with salt water.

Dr. Henry D. Noyes, New York: I have frequently noticed the connection between the lithæmic condition and certain affections, not only of the naso-pharynx, but also of the external auditory canal. There are certain eczematous conditions associated with the gouty diathesis.

Dr. F. P. Capron, Providence: I have seen a number of cases of so-called hay-fever in which the premonitory symptoms were those of indigestion. For two or three weeks before the time of the onset of the regular attack, the patient would complain of digestive disturbance.

Dr. Huntington Richards, of New York, read a paper on a case of

Polypoid Angioma of the Ear.

The patient, a girl 6 years of age, came under observation May 4, 1888, with profuse fetid otorrhœa, unaccompanied with pain, and dating only from the preceding February. Hearing seemed good. No bleeding from the ear had ever been observed. The general health was excellent.

Examination of the affected ear revealed a polypoid mass, almost occluding the canal. The color was deep purplish-red. A considerable portion of the tumor was at once removed with the snare, and the remainder of the growth was extracted on the following day, leaving a small pedicle attached, seemingly to the outer surface of the drum membrane, close to the prominence formed by the short process of the hammer. This stump was cauterized with chromic acid. Hemorrhage from the cut surface of the growth was unusually profuse at both operations. The child's hearing is now excellent, although both membranes are depressed and of a dark grayish-red color. The removed growth was pronounced to be an angioma. Three micro-photographs, showing the appearance of the growth, were exhibited.

Dr. Huntington Richards, of New York, reported a case of

False Drum Membrane.

The patient, a man 21 years of age, was totally deaf in the affected ear. There was a vague history of an attack of otitis media in early childhood. The other ear presented the common appearance of otitis media purulenta chronica. Examination of the ear that was not discharging showed a mem-

brane occluding the canal. It differed from the normal drum membrane in color, shape, relation of its plane to the long axis of the canal, and in apparent thickness. It varied little in color from the skin lining the canal. The surface was perfectly smooth.

A triangular opening was made through this membrane. The operation caused no pain Through this opening, it was seen that there was no drum membrane, but that the inner wall of the tympanic cavity came into view. The hearing was only slightly improved. When seen a few days later, no discharge had appeared. Since that time he has not returned to the infirmary.

Dr. S. Sexton, New York, in opening the discussion, said: I have seen several such cases as that described in the last paper. In one seen last year, I removed the membrane, and then took out the malleus and incus. This case made a good recovery. The improvement in hearing was decided. I would suggest this operation, in such cases, as a possible means of improving the hearing, for it opens up the tympanic cavity, which is a good condenser of sound; and, in the second place, to prevent the accidental occurrence of inflammation in these parts when it might be difficult to obtain relief.

Dr. T. Y. Sutphen, Newark: I have seen one or two cases of this trouble, which seems to me to be due to cicatricial closure of the external canal. It seems to me that the condition would be best spoken of as cicatricial closure of the canal.

Dr. Chas J. Kipp, Newark: These cases result from granulations, and I have watched the formation of these membranes. In treating this condition, I have incised the membrane and put in laminaria bougies, and the false membrane has disappeared.

Dr. A. Mathewson, Brooklyn: A woman was under my care for some time with an eczematous condition of the external meatus. She then passed from observation. Some time later she presented herself, with a disk-like closure of the external canal. This was not complete, but there was a small opening in the centre. I dilated this opening with laminaria bougies, and the ear was left in perfect condition.

Dr. Samuel Theobald, Baltimore: The members may recall a case that I reported in which there was occlusion of both external canals. There was a history of suppuration, and no doubt there was ulceration and gradual closure.

Dr. Chas. H. Burnett, Philadelphia: I have seen several of these cases of dermoid diaphragms in the canal. Three of these were in private practice. One was in an old man, and it remained imperforate during the whole time he was under observation. The other cases were perforate when they came to me. There was slight discharge, which I checked, and the perforation healed. In one case the discharge returned after a short time, and the perforation reappeared. Under treatment it healed, and I have reason to believe has remained closed since—a period of four or five years. In the other case it remained closed for a year, when the opening reappeared with slight discharge. The discharge ceased under treatment, and the opening closed and has remained closed.

Dr. B. Alexander Randall, Philadelphia: In the case of a boy, 12 years old, in which there was closure of the meatus as a result of injury with forceps during labor, I excised the diaphragm. The cavity was thoroughly washed out. The case was then treated in the ordinary way. The hearing obtained was certainly one-fourth of the normal.

EVENING SESSION.

Dr. J. B. Emerson, of New York, read a paper on

The Flexible Catheter as a Drainage-Tube,

and cited several cases exhibiting the use of the flexible catheter as a drainage-tube. He said that with deep-seated inflammation of the auditory canal or mastoid cells, maintenance of drainage through a fistula is a necessity, and to prevent closure of the fistula, either by granular growth or natural healing, is important. Dr. Emerson recommends the use of the flexible catheter as generally the best means to employ, and states his reasons to be the comparative comfort and safety, together with convenience of control by both surgeon and patient. The efficiency observed in the use of the flexible catheter was also referred to.

Dr. O. D. Pomeroy, New York, in opening the discussion, said: Some years ago I recommended the use of soft rubber tube in suppurative otitis in little children with closure of the canal with no changes except swelling. The canals are so small that the tube cannot be pushed in in the ordinary manner. A piece of small tubing was hooked to the extremity of a notched probe, which passed through it. The tube was then drawn tight, thus reducing its size. In this way it could be readily introduced. When the tube was released it tended to resume its proper size, and the probe was withdrawn. Almost all these cases did well.

Dr. Chas. J. Kipp, of Newark, reported three cases of

Transient Bilateral Horizontal Nystagmus in connection with Purulent Inflammation of the Middle Ear.

Case I.—A young man, 21 years of age, had had otorrhœa seven or eight years previously. Three months before coming under observation he had an acute exacerbation and suffered intensely with pain in the ear and head. The otorrhœa much diminished. Two or three weeks later he came, stating that he saw objects double, was dizzy, and could not walk. There was marked nystagmus in a horizontal direction. The vertigo and nystagmus continued four days. With the cessation of the nystagmus the vertigo disappeared.

Case II.—A young man, treated six years previously for acute otitis media purulenta ending in recovery, appeared in March with an acute attack. Paracentesis was performed. The pain, however, continued for a long time. Finally swelling developed behind the mastoid, and this was accompanied with several epileptiform attacks. One day, pressing on the swelling, pus poured from the canal. With this there was a sudden jerk of the head and nystagmus. The latter continued for about ten minutes. This was produced every time pressure was made on the mastoid. The mastoid was subsequently opened. Since then there has been improvement.

Case III.—A young man, after exposure, was seized with intense pain in the ear, followed by otorrhœa. When he came under observation there was great pain. This was not relieved by treatment, but continued two or three weeks. Then a swelling appeared below the ear. This was incised and a large quantity of pus evacuated, with relief to the pain. Some days later, while washing out the cavity, the fluid came through the ear when considerable force was used. At the same time there was a jerk of the head and nystagmus continuing several minutes. This could always be produced by making a forcible injection.

Dr. O. D. Pomeroy, New York, in opening the discussion, said: Reference has been made to epileptiform symptoms in one of the cases. I have recently seen a case of epilepsy in which the exciting cause was suppuration of the middle ear. With recovery from the ear-disease, the convulsions ceased and have not returned.

Dr. J. O. Tansley, of New York, exhibited

An Improved Aural Snare.

The snare was devised to overcome the objection to the ordinary Wild snare, which is the little jerk and rebound of the instrument when the growth is cut through. The instrument exhibited consists of a small tube through which the wire passes, to be connected with a small bobbin, by the turning of which it is gradually shortened.

A paper by Dr. S. Sexton, New York, on

Foreign Bodies in the External Auditory Canal

was read by title.

The Society then went into executive session, and the following officers were elected:

President, Dr. J. S. Prout, of Brooklyn; *Vice-President*, Dr. Gorham Bacon, New York; *Secretary and Treasurer*, Dr. J. J. B. Vermyne, New Bedford, Mass.; *Committee on Membership*, Dr. A. Matthewson, Dr. D. B. St. John Roosa, and Dr. John Green; *Delegate to Congress of American Physicians and Surgeons*, Dr. W. H. Carmalt, New Haven; Alternate, Dr. G. Bacon, New York.

The Society then adjourned to meet at the Arlington Hotel, Washington, D. C., Tuesday, Sept. 18, 1888.

Periscope.

Case of Sextuple Pregnancy.

An extraordinary case of multiple pregnancy recently occurred at Castagnola, near Lugano, in Switzerland. A woman, 36 years old, wife of the local *sindaco*, was delivered on May 4, of six children—four boys and two girls—at a birth. They were born alive, though prematurely, but they all died in a few seconds. Their united weight was only three pounds thirteen ounces, and the length of their bodies, which were perfectly well formed, varied from 8¾ to 10¼ inches. The case, which is said to beat all previous *authentic* records of human fecundity, is vouched for by Dr. Francesco Vassalli, of Lugano, who attended professionally on the occasion, assisted by Drs. Bianchi, Reali, and Solari, of the same place. Dr. Vassalli has reported the case in detail in the *Gazzetta Medica Italiana-Lombardia* of June 2, and an abstract of his account may be interesting. It has been stated that the woman had previously borne seven children, in two batches of four and three respectively, but this is inaccurate. She was married only two years ago to a

widower, 41 years old, who had ten children by his first wife. There were no twins among these, but it appears that he has five cousins—brothers—each of whom is the father of twins. A sister of the patient has also borne twins on one occasion. The patient herself, in the first year of her marriage, had a boy who is now fifteen months old and in perfect health; she suckled him for eleven months, when she became aware that she was again pregnant. The catamenia had reappeared in the seventh month of her nursing, and the last period began on December 4 and lasted six or seven days; conception must therefore have taken place in the early part of January. The patient suffered severely almost from the first from weakness of the legs and vomiting, and in the fourth month the abdomen was as large as it usually is at full term. On the morning of May 4 (being about the 115th day of pregnancy), whilst doing some light outdoor work, she felt a sudden desire to empty her bowels, and, on squatting down for the purpose, there was a gush of hot liquid from the vagina, which she recognized as amniotic fluid. She immediately went home, walking with much difficulty, on account of something which she felt protruding from the vulva. A neighbor was called in, who found a tiny fœtus hanging by the foot, which was speedily delivered. All this occurred within a few minutes. Dr. Vassalli was then summoned, and found the os only partially dilated, whilst an unruptured sac could be felt through it. There being no urgent symptoms, the patient was kept quiet, and, after passing a fairly good night, she got up the next morning to attend to her household duties, feeling quite well. Toward mid-day, pains came on with increasing violence, and she lost a good deal of blood. Seeing that abortion was inevitable, Dr. Vassalli thought it advisable to hasten delivery. He therefore punctured the membranes and extracted a small fœtus by the foot. After tying the cord, he followed up the placental end with his right hand till he came to another sac of fluid; this he also punctured, and delivered a third fœtus. Two more were extracted in the same way, the whole procedure occupying two hours. Fresh hemorrhage now occurred, and the uterus did not contract. Dr. Vassalli therefore tied all the cords together and made gentle traction, at the same time applying pressure to the womb. This failing, he introduced his hand into the uterus and tried to bring away the placenta, which, however, he only succeeded in tearing, with the result of making the bleeding more alarming. Having no hæmostatics at hand, he sent for assistance, keeping his hand in the uterus meanwhile as a plug. It was four hours before help arrived; the after-birth was then got away with some difficulty, a sixth fœtus, enveloped in its own membranes, being found attached to it. The patient bore the trying ordeal very well, and made a good recovery. The heads of the fœtuses were rather large relatively to the bodies, and the eyes were covered with the pupillary membrane. The genital organs were completely differentiated. There was only one placenta. The specimen has been placed in the museum of the R. Scuola Ostetrica, at Milan. Dr. Vassalli calls attention to the curious fact that Castagnola is rather remarkable for multiple births. From the official registers, it appears that in a population of 585, from January 1, 1876, to May 10, 1888—that is, 13 years and 4 months—there was a total of 247 births. Of these, 228 were single and 19 multiple, the latter consisting of 5 cases of twins, 1 of triplets, and the present one of *sextuplets*. The proportion of twin births, therefore, was 1 in 45, instead of Schröder's estimate of 1 in 89; and of triplets, 1 in 228, instead of 1 in 7,910.—*British Med. Journal*, June 9, 1888.

Double Gun-shot Wound of Brain; Trephining; Recovery.

Dr. George R. Fowler, Surgeon to St. Mary's Hospital, reported this case to the Brooklyn Surgical Society, February 2, 1888: The patient, a man 30 years old, entered St. Mary's Hospital May 13, with a gun-shot wound of the head. The pistol was fired at short range, the muzzle almost touching his forehead. The first bullet entered the frontal bone a little to the left of the median line; the second entered at the inner canthus of the right eye, tearing away the lower and posterior portion of the frontal sinus of that side. He was unconscious when he came into the hospital. After making a crucial incision and laying bare the bone, it was found that a compound fracture of the frontal bone had been sustained, the bullet having passed directly downward, perforating the dura and being lost in the cerebrum. The bullet was from a 32-calibre revolver, and the opening in the dura was about the size of a little finger. Some portion of the frontal bone, which was driven into the brain, was removed with the forceps, and was found to be stained with the lead of the bullet.

It was difficult to trace the course of the

second bullet, but the posterior wall of the right frontal sinus was entirely destroyed, and portions of that were also taken out from the cerebrum. A portion of brain-matter escaped. The portion of the frontal lobe resting on the roof of the orbit of this side was destroyed. There was a considerable laceration of the brain at this point. After removing the débris, Dr. Fowler tried to locate the balls by drawing an imaginary line across, as nearly as possible, in a line with the pistol, and trephining posteriorally at a point where that line would meet. After trephining the occipital bone, a slender needle was passed into the brain substance, making the needle pass systematically in lines radiating from this latter opening as a central point to all portions of the brain as nearly as could be reached, but no trace of the bullet could be discovered. The openings were then closed.

In front, after removing the débris, about a dozen strands of catgut were passed into the wound, coming through the frontal bone, or rather through the tissues covering the frontal bone; and half a dozen strands of catgut were also passed down through what remained of the frontal sinus to afford an escape at this point. The left nasal cavity was irrigated with mercuric iodide solution, cleansed and stuffed with iodoform cotton, and antiseptic dressing applied. The patient's after-history was entirely uneventful. He never even complained of a headache. He was up and about, assisting in the wards of the hospital as a ward orderly, in three weeks, and left the hospital June 7, fully healed and in possession of all his faculties. There is a little difference between the pupils of the two sides, the left being comparatively larger than the right. This is the only indication of any disturbance, if, indeed, this is due to the injury.

About the 5th of last September he noticed some discharge where the upper opening had been, and upon exploration necrosed bone was found, which could be discovered from both openings. The parts were reopened, a small portion of the bone was removed from the lower opening, and it was thought that that would end the trouble. But it did not, and about four weeks afterward he again appeared with the upper opening still discharging pus. Another exploration revealed the existence of necrosed bone. A long incision was then made, connecting the two openings, from the central portion of the frontal bone down to the site of the old wound and to the inner canthus of the left eye. A sequestrum, three-eighths of an inch in length, was found after chiseling away a part of the frontal bone. There was also found lying at that point a strong fibrous partition between the fragments of bone and the cavity of the skull beyond, showing that nature had walled out, as it were, this portion of necrotic bone and left it lying there loose. It was removed, catgut drains were placed in position, and the patient made a rapid and complete recovery. He suffered —at the time of the report—from nothing except, perhaps, a little mental depression, which may or may not be the result of the original injury. Dr. Arthur Mathewson examined him and stated that the difference in the pupils was probably a congenital defect, and had nothing to do with the injury. Both bullets are still somewhere in the brain. Dr. Fowler has made no attempt to locate them with the induction balance. This case is an example of the toleration of the brain-tissue to the infliction of considerable traumatism, and to the presence of foreign bodies.

Dr. Wight, in opening the discussion on Dr. Fowler's communication, said that in 1864, on board the hospital transport "Western Metropolis," he saw a man sitting in a chair with a hole right in the middle of his forehead, about an inch and a half above his eyebrows. The surgeon in charge had an excellent probe and was trying to get it into the hole. As Dr. Wight came up, he was handed the probe. He saw there was no hole in the skull, and learned that it was a pistol-bullet, which had been fired at a distance of not more than ten or a dozen feet. He handed the probe back to the surgeon, and put his finger upon the back of the man's head and felt the bullet there. He simply made a little incision at that point, and the bullet dropped out.

In another case, some twelve years ago, he saw a boy eleven or twelve years of age, and inclined to hydrocephalus, who, on the 4th of July, while playing, with another boy, with a ten or twelve inch cannon, had a stone as large as the size of an almond shot into his head. It entered the skull just immediately above the groove for the right lateral sinus. Dr. Wight saw him on the 5th of July, and, after exploring it carefully, trephined, but could not find the stone. The boy lived some eight or ten years, and then finally died of tuberculosis of the lung. He made good progress in his studies, and was a bright, active, business lad. Whatever became of the stone he cannot tell.—*Brooklyn Medical Journal*, June, 1888.

THE

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CHARLES W. DULLES, M.D., EDITOR.

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Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate, or omit words like "the," and "a," or "an."

Make communications as short as possible.

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When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.

The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

MEDICAL BULLETINS.

In a recent number of the *Nation*, attention is called, in a sharp editorial, to the modern practice of issuing what are called medical bulletins in regard to the condition of distinguished patients. The editor of the *Nation* adds his own condemnation to that of Miss Frances Power Cobbe, in a late number of the *Contemporary Review*, and both point out clearly some of the most objectionable features of the too detailed reports which are often sent out nowadays by medical men who are in attendance upon eminent or famous persons.

This practice is not confined to any one country, but it is sufficiently common in America to deserve notice. Within ten years, we have had, at short intervals, the details of the illness of a variety of persons exposed to the public gaze. Presidents, generals, actors, authors, and even criminals have furnished subjects for these reports, and the community has been imperfectly instructed in regard to matters of pulse, respiration, and temperature, which can do it no good, and in regard to excretions and discharges, which are nothing if not disgusting.

Some of the lay critics have intimated that the medical bulletins are intended or expected to act as an advertisement of the physicians or surgeons in attendance. This is a natural inference, although we are convinced that it does injustice to some of those who have issued them. Of course, in so far as the criticism is just, it exposes a very contemptible motive; but we may leave it to those who think it needs to be made prominent to urge it as they think best. If it were wholly unjust, there would still be much to be said against the medical bulletins of the present day.

No one who has carefully studied this matter can doubt that one effect of bringing the laity to the bedside of distinguished patients has been derogatory to the sanctity of illness, and has broken down the privacy which most sufferers long for; more than this, it has robbed dying men of the dignity which death usually confers, so that, to paraphrase what Miss Cobbe says, their last hours are not remembered as those of great and noble statesmen or soldiers, but as those of weak and wretched men. This is an evil which seems to us greater the more we reflect upon it.

Another evil due to the publicity given to the details of the sickness and treatment of distinguished patients is the comment excited in regard to the medical or surgical measures carried out by their medical attendants. The discussions in regard to the treatment of President Garfield had not faded from the public memory before the painful contentions in regard to the malady of Emperor Frederick of Germany came to increase distrust of medical acumen and surgical skill.

The most recent case in which medical bulletins have been conspicuous has carried the possibilities of evil in a new direction, for it has furnished an opportunity for the venders of a secret remedy most ingeniously to turn to their own account the credit due to a well-known and very simple restorative agent.

These are some of the evils for which the modern practice of issuing medical bulletins is responsible. They are beginning to attract attention from thoughtful men outside of the medical profession, and we may be sure that they will bring our profession into contempt, unless they be soon corrected. It may not be necessary to adopt the suggestion of the *Nation*, that the medical societies take the matter up and formulate rules to govern the preparation of reports of the progress of patients in whose welfare the world has a deep interest; but something must be done to strip them of the appearance of advertising and to purge them of details which are useless or offensive in their nature.

One thing our non-medical fellow-men ought at least to know, namely, that what they condemn is equally deprecated by the members of the medical profession, and that, while we regret the necessity for their criticism, we accept their rebuke and hope to be profited by it.

EARLY OVARIOTOMY.

The question of early ovariotomy is one of importance; and the greatly lessened mortality after ovariotomy in recent years is at least partly due to earlier operation. Dr. Sutton, in the Reporter, June 2, 1888, forcibly insists upon this point; but, from the illustrative case which he reports, it might be inferred that the advantages consist in the ease and rapidity with which the operation can be done. A short operation unquestionably favors recovery, not only by the less amount of shock experienced, but by the smaller number of germs which gain access to the peritoneal cavity. Adhesions are much less apt to be encountered in cases operated upon early, than in those in which operation has been deferred.

But there are other and weighty reasons why ovariotomy should be done early. Many dangers and much suffering are thus avoided. Formerly, it was considered advisable to delay operation until the tumor became abdominal, until it reached the umbilicus, or until the general health became affected. The soundness of this opinion is no longer admitted. It was urged in favor of waiting, that thereby the tumor would come in relation with the abdominal wall, that the intestines would be displaced, and hence would be in less danger of injury from the knife of the operator; but, as the abdomen is opened daily for disease other than tumors, without injury to the intestines, the force of this argument is lost. It was urged with more reason that intra-abdominal manipulations are rendered easier in late operations, owing to the stretched condition of the abdominal walls; but experience in abdominal section for pelvic inflammations has largely removed the fear of tense recti muscles, and has demonstrated the comparative facility with which intra-pelvic manipulations can be made. The supposed greater difficulties in the technique of early operations no longer influence the surgeon.

The undoubted semi-malignancy of varieties of ovarian tumors, formerly considered benign, is a strong indication for early operation. A. Doran and others have repeatedly observed the development of malignant tumors in the abdomen after the extirpation of dermoid tumors. Numbers of cases of proliferating glandular cystoma have been reported in which, after ovariotomy, gelatinous masses formed in the abdominal cavity and adhered to a large part of the peritoneum—pseudo myxoma peritonei. In all these cases, the ovarian tumor contained tough gelatinous material, either mainly or exclusively. As is well known, papillary cystomata are very apt to infect the peritoneum and cause secondary

papillomata. This may occur spontaneously, either from the separation of papillary masses which become grafted upon the peritoneum, or by rupture of the cyst and diffusion of its contents throughout the peritoneal cavity; or infection may occur during ovariotomy. There seems to be very little doubt that the peritoneum may serve for the implantation and further growth of particles of all kinds of ovarian tumors, and that this is especially apt to happen, apart from malignant growths, in papillary cystomata and proliferating cysts with thick non-fluid contents. Were not the operation of tapping ovarian cysts already condemned or at least restricted to very exceptional cases for other sufficient reasons, this danger of infecting the peritoneum and causing secondary tumors might be urged against it. Early ovariotomy not only prevents the breaking-down of the general health which is always caused by long-standing ovarian tumors, but saves the woman from dangerous intercurrent accidents and diseases which at any time in the history of these growths are apt to occur. Torsion of the pedicle probably occurs in eight per cent. of all cases, and is especially common in dermoid tumors and tumors with long small pedicles. Hemorrhage into the cyst, at times rapidly fatal; gangrene or suppuration of the tumor, with acute diffuse peritonitis are the usual results of this accident, and, since the abandonment of tapping, are seldom met with from any other cause. Rupture of ovarian tumors has been repeatedly observed, though it is not so common as rupture of broad ligament cysts. No reaction may follow, but peritonitis is common after rupture of dermoids, or colloid tumors if hemorrhage occurs; and metastatic tumors may develop, especially after rupture of papillary cysts.

Solid tumors of the ovary are almost always malignant, hence early removal offers the only hope of radical cure.

Intra-ligamentary cysts form an exception to the rule of early operation. Although many of these tumors are papillomatous, the extreme difficulty and danger of removing them early, while they are entirely intra-pelvic, are considered at the present time a contra-indication to operation; but, as great improvement in the technique of the removal of these growths has been made in the past few years, it is to be hoped that further progress will enable the surgeon to remove them with safety, if not with facility. As a further exception, it should be mentioned that not a few surgeons refuse to operate on intra-pelvic ovarian cysts, which grow slowly or not at all, without special indications.

GLYCERINE SUPPOSITORIES FOR CONSTIPATION.

We have already, in the Reporter, February 4, 1888, directed attention to the injection of small quantities of glycerine into the rectum as a means of overcoming constipation. This method, somewhat extensively employed in Germany, it is often by no means convenient to carry out, because few syringes are available for injecting such small doses as fifteen drops of any medicament. A better idea has been suggested, as pointed out in the Reporter, July 28, 1888, by Boas, in the *Deutsche med. Wochenschrift*, namely, that the glycerine be given in suppositories or capsules.

This method is simple, easy of execution, and is said to be very efficient. Just how the glycerine acts to produce a movement of the bowels is not clearly understood, but the testimony is practically unanimous that fifteen drops of pure glycerine introduced into the rectum will bring about a comfortable and satisfactory evacuation of the bowels.

With glycerine in plenty and drug-stores full of good capsules it ought to be easy for our readers to test the value of this method, which, if it is what it is claimed to be, must be very superior to the use of enemata or—in many cases—of purgative medicines given by the mouth.

A CROOKED WAY.

Our attention has been directed by one of our subscribers, a distinguished surgeon of this city, to a circular issued by a firm of instrument-makers, which bears the following notice: "Physicians sending their patients to us to have trusses fitted, or for elastic hosiery, will please send letter of introduction, that they may be *credited with the 25 per cent. discount allowed them.*"

This is such a manifest bid for trade, and becoming a party to it such a flagrant violation of the principles of the Code of Ethics, that we quite agree with our correspondent that it should receive the unqualified condemnation of all honorable physicians. Any such collusion as this circular intimates may exist between doctor and instrument-maker results in robbery of the patient, and is thoroughly dishonest.

PRECOCIOUS MENSTRUATION.

A curious example of precocious menstruation, to which we briefly alluded in the REPORTER, August 4, 1888, is given by Dr. H. Kornfeld in the *Centralblatt für Gynækologie*, No. 19, 1888. The subject was a child only three years old, addicted to masturbation, which had a periodical flow of blood from the vulvar orifice in the beginning of April, May, June, and July, exactly at the time when the mother menstruated. No injury of the vagina could be found to account for the bleeding.

This case is curious enough, although, like most others of a similar sort, it has no obvious scientific value. If the masturbation were energetic enough, it would not be remarkable that it should produce congestion too violent for the resistance of the delicate mucous membrane of the genitalia; but, if it were not very energetic, or if it were not exercised shortly before the appearance of the bleeding, the case would simply belong to the class of physiological curiosities which is more interesting than instructive.

Masturbation in children so young is not so rare as some may imagine. It is a singular fact that, in many children, the propensity to amuse themselves with manipulations of a portion of the body to which the hands naturally gravitate in sleep and in waking seems to be about as natural as to eat when food is brought near them. The youngest children will unblushingly handle their sexual organs in the presence of their elders, and often need patient care to prevent their forming a regular habit of masturbation.

It would be interesting to learn how often there has been a coincidence of this practice with precocious development of the signs of puberty, and whether the former gives rise to the latter, or *vice versâ*.

HIGHER MEDICAL EDUCATION.

The College of Physicians and Surgeons of New York has announced that it will receive no new students, except upon the basis of a three-years' course of study. This is a strong and courageous movement, which, we trust, will be crowned with success. One way to help it to succeed is for medical men who approve the plan of a full three-term curriculum to prefer schools which have adopted this plan to those which have not adopted it. Warm support from the members of the medical profession is deserved by medical schools which turn their backs on the pecuniary advantages of a low standard of medical education; and those who have at heart the best interests of the rising generation of physicians, as well as of the profession at large, ought to bear in mind the names of the schools which have decided to give their students the best preparation for the work which the present times can afford.

While on this subject, we would refer to an implied criticism on a medical school in Philadelphia, which was contained in an editorial in the REPORTER of June 30, 1888. At that time we said: "There are ways in which men who have not been studying three years in any medical school can get a degree from it."

This statement, though literally and

exactly true, was alluded to by one of our contemporaries as if it were unfair, and one of the professors in the school referred to, in a visit at this office, has made a personal explanation in regard to the matter. As our statement was made simply in the discharge of what we conceive to be our editorial duty, and not from mere prejudice, we are happy to be able to state now, on the authority mentioned above, that hereafter the Medico-Chirurgical College of Philadelphia will exact a three-years' course of study from all persons to whom it grants its degree, and no study in a preceptor's office will be counted as a part of this period.

We trust that the time is not far distant when all the medical schools of the United States will stand squarely on this basis, and when there shall be no way in which the degree of doctor of medicine can be obtained in this country except after three years of honest study. Heretofore this principle has too often been neglected or evaded; but we trust that both the neglect and the evasion will soon be things of the past, and thus the medical schools of the United States will, before long, occupy the position which they should in the eyes of the whole world.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

THE NATIONAL PHARMACOPŒIA OF UNOFFICINAL PREPARATIONS. First issue. By authority of the American Pharmaceutical Association. Large 8vo, pp. x, 176. Published by the American Pharmaceutical Association, 1888.

As the U. S. Pharmacopœia does not contain a large number of remedies which are frequently used by physicians, the American Pharmaceutical Association has done a most serviceable thing in gathering together in one book the formulæ of the most important of these omitted preparations, so that druggists everywhere may prepare them according to one standard. The preparations embodied in this book include a number which are largely known to the profession through the industry of certain manufacturing chemists. It is not likely that the knowledge how to prepare these drugs will materially interfere with the sale of those which have already secured a sale and established a reputation, but it is very desirable that medical men should know how they are made, and that all druggists should know how to prepare them in an emergency, or if it is not convenient for them to keep a supply on hand. The book is one which will be of great value to druggists, and it will certainly prove interesting and instructive to physicians who have the opportunity and inclination to study its pages.

A MANUAL OF THE MINOR GYNECOLOGICAL OPERATIONS. By J. Halliday Croom, M.D., F.R.C.P.E., Lecturer on Midwifery, etc., Edinburgh, Scotland. First American, from the second Edinburgh, edition. Revised and enlarged by Lewis S. McMurtry, A.M., M.D., formerly Professor of Anatomy in the Kentucky School of Medicine, etc., with numerous illustrations. Small 8vo, pp. 228. Philadelphia: Records, McMullin & Co., 1888.

This book contains a great deal of information in regard to the details of minor gynecological operations, among which, to our surprise, we find included those for vesico-vaginal fistula, incision of the cervix uteri, trachelorrhaphy, removal of fibroids, and laparotomy. This is giving much more than it promises; but the reader can hardly complain, because it is very well done. As a handy book of reference for medical students, and for practitioners who are unable to have and study the more systematic treatises on gynecology, it is a volume which is calculated to be of great service. It is clear and simple, and goes into many details which are not usually discussed in more pretentious works, but which often prove troublesome to those who have not had the advantage of preparing for their work in large and well-conducted clinics. The work of the author is excellently arranged and well carried out; and the work of the American editor makes the book better suited than when in its original shape to the needs of American medical men.

LESIONS OF THE VAGINA AND PELVIC FLOOR. By B. E. Hadra, M.D., Austin, Texas, with 83 illustrations. Small 8vo, pp. 329. Philadelphia: Records, McMullin & Co., 1888.

The author of this book states, in his preface, that it was originally intended to discuss malpositions of the "uro-genital system"—an unfortunately chosen term—which are called "descents or prolapse," but that, as the work of preparation progressed, he decided to include all gynecological injuries of the vagina and floor of the pelvis. The result has been a book which covers much ground of interest to the general practitioner, and which contains much sensible advice. In the main, the author's expressions are carefully worded, and he seems to have been especially on his guard against certain errors of statement which have long been found in works on gynecology. His views in regard to the mechanical principles involved in the structure of the different pelvic organs are sound, and his recommendations in regard to the treatment of the gynecological injuries discussed are trustworthy. His book is rather a very readable exposition of his own opinions than an elaborate treatise; but we believe it is calculated to be useful as well as interesting.

ESSAYS ON HYSTERIA, BRAIN-TUMOR, AND SOME OTHER CASES OF NERVOUS DISEASE. By Mary Putnam Jacobi, M.D. Large 8vo, pp. 216. New York: G. P. Putnam's Sons, 1888. Price $2.00.

This volume contains a collection of essays of different sorts, which have appeared at various times and in various places. The most considerable are those

named in the title; but the shorter essays are equally of great interest and value. The author is known as an unusually careful student and a clear writer, and, when dealing with such subjects as these essays treat of, she is at her best. The space which we can spare for our reviews does not permit us to point out, as we would like to, the admirable way in which she has studied the physiology of brain-tumors and aphasia, or the manifestations of hysteria, or the acumen she displays in a criticism on Dr. Bartholow's Cartwright Lectures on the "Antagonism between Medicines and between Remedies and Diseases"; but we can heartily commend to our readers a careful perusal of her work, which cannot fail to prove both interesting and profitable.

CORRESPONDENCE.

Introduction of Ether into Philadelphia Practice.

To the Editor.

Sir: The *Excerpta* from the Presidential Address of Dr. Levis, published in the Medical and Surgical Reporter for July 21, suggest a thought in regard to the introduction of ether among remedial means used in Philadelphia practice. It was during the first half of the medical course of the University of Pennsylvania for 1847-48, which I attended as a second-course student, that I first saw ether administered by inhalation for the purpose of benumbing pain during an operation. Dr. William E. Horner was the operator, and the ether was exhibited under his superintendence. Great circumspection was observed in the process, thirty or forty minutes being consumed in producing full anæsthesia. The result was all that could be desired. I understood this to be the first use of ether for this purpose in Philadelphia. True it is that, during this entire winter, whilst I was in close attendance upon the clinics in the Pennsylvania Hospital, conducted by Doctors Randolph and Peace, no anæsthetic was employed, although many capital operations were performed; neither was it again resorted to during the winter's course at the institution first named.

Enos T. Blackwell, M.D.

Cedarville, N. J.,
July 26, 1888.

Milk for Babies.

To the Editor.

Sir: Dr. E. A. Wood, in the Reporter of June 30, has given some good suggestions on "Preparation of Milk in Summer."

In an article I have recently written, I have contended that the basis of our judgment with regard to cow's milk is wrong, since what is furnished by the milk-trade is not milk as it should be, but is an old, altered, and unfit milk for the babies when it reaches our city homes. Just now I have a terribly diseased child fed on milk bought at the grocery. Now, it is a fact that such milk is likely to be the worst kind of all. A milk-man, who formerly supplied my family, told me that all the old milk—too old to furnish for families for table use—he sold at the grocery to be used in cooking. Many a time have I been called to sick children who had been fed on such milk, and who began to thrive when fed on milk directly from milk-men. Not all grocery milk is of this kind, but it is sufficiently common to be dangerous and to suggest careful inquiry.

When practicing in the country, we did not consider it any very great calamity for a child to be deprived of its mother's breast. The child's life was not greatly imperiled thereby; the greatest disadvantage was the trouble entailed upon the mother, who had to care for the child. I think the country feeding on whole cow's-milk, or warmed with a little hot water, as also the experience of Dr. Lynde, of this State, quite controvert the notion that the excess of curd in cow's milk is in itself particularly harmful. I do not see why the same principle does not apply here as to the use of baked beans with adults. Chemistry teaches us that there is great nourishing quality in beans and peas, but it also teaches that the human digestive organs can extract only a portion of that nourishment, the remaining portion going off in the feces. If it should be contended that beans were not wholesome, because the stomach could not fully digest them, we should be obliged to give up eating "Boston baked beans." Why may not nutritive elements be carried off as waste from a child's stomach just as well as innutritious substances, so long as the child does digest enough of them for its own nourishment? If the child thrives on cow's milk, and yet does digest only one-half of the curd element, why is it not just as well for the balance to go off as waste as that we should feed with something else that is innutritious in order to make bulk for the proper stimulation of bowel movements? I think we have been mistaken here, and have condemned cow's milk because it was not wholly digested, curd being found in the stools.

My condemnation of cow's milk is not in consequence of the amount of curd it contains, but because the milk itself is not gen-

erally fresh and pure when given, especially in our cities; and I see no way of getting cow's milk which is fit for an infant's use until special efforts are made to produce and supply milk especially for infant-feeding—and this wholly outside of the present milk-trade. Let milk-men supply as they do now for common family use, but let special farms near our cities produce milk from good cows, fed on proper food and drink and otherwise properly cared for, and let the milk be properly cooled and served to the families having infants, directly after each milking.

Yours truly, E. Chenery, M.D.
65 Chandler Street,
Boston, Mass.

Notes and Comments.

Cholera Infantum.

Dr. Louis Starr, Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, in a communication to the *Medical Standard*, July, 1888, says:

The large and frequent watery evacuations characteristic of this disease are such a drain upon the system that it is of the first consequence to replace the waste by food and drink and at the same time check it by appropriate treatment. The irritability of the stomach is a formidable barrier to alimentation, nevertheless every effort must be made to give food in small quantities and at short intervals. Should the infant be at the breast, it may be allowed to nurse for a few minutes every half-hour or hour. If hand-fed, it may be given the foods suitable in entero-colitis or in chronic vomiting, in such quantities as can be retained and at intervals corresponding in frequency to the smallness of the amount. Bits of ice and water should be allowed freely, even though they be rejected as soon as swallowed.

To check the diarrhœa, opium and astringents are necessary. A very serviceable formula is the following:

℞ Liquor morphinæ sulphat. . . . . f℥ i
Acid sulphurici aromat. . . . . ♏ xxiv
Elix. curaçoæ . . . . . f℥ iv
Aquæ . . . . . q. s. ad f℥ iii
M. Sig. One teaspoonful every two hours for a child six months old.

With this, two drops of laudanum, suspended in two teaspoonfuls of starch-water, should be given by the rectum every three hours. Two or three times daily a mustard plaster, one part of mustard to five of flour, must be applied over the whole surface of the abdomen, long enough to redden the skin, and the whole body should be sponged several times a day, with water at a temperature of 95° F.

The clothing, diapers, and person must be kept perfectly clean, the sick-room must be as large and airy as can be commanded, and the infant must lie upon a bed and not be constantly nursed on the lap. If it is possible, the patient should be sent early to the seashore or country, as this affords by far the best chance for recovery. Failing in this, morning and evening airings in a coach, or daily steamboat excursions, must be resorted to.

Stimulants are needed from the first, to ward off prostration—from five to ten drops of whiskey in a teaspoonful of lime-water may be given every two or three hours at the age of six months.

When collapse sets in, the quantity of alcohol must be increased, and, if the stomach can bear it, a combination of stimulants is useful, as:

℞ Spir. frumenti . . . . . f℥ iv
Ammon. carbonatis . . . . . gr. xxiv
Syr. acaciæ . . . . . f℥ i
Aq. menthæ pip. . . . . q. s. ad f℥ iii
M. Sig. One teaspoonful p. r. n

The temperature must be maintained by hot flannel wraps and hot water-bottles, and the child be kept in a horizontal position and disturbed as little as may be. In this stage, astringents are still indicated, but opium must be used with great caution, or even discontinued entirely, when there are cerebral symptoms and semi-coma.

In the fortunate instances in which this plan is successful, it is still necessary to treat the succeeding diarrhœa, and to build up the general health by good food, tonics, and fresh air.

Gastrostomy.

Dr. Miles F. Porter, of Fort Wayne, Ind., reports in the *Journal of the Amer. Med. Association*, July 30, 1888, the details of a very interesting case in which he performed the operation of gastrostomy upon a young man, 19 years old, who had a stricture of the œsophagus in consequence of drinking some caustic liquid. The operation was conducted in two "times," the first comprising the opening of the abdomen and securing to the edges of the wound a portion of the stomach; the second consisted in making an opening into the stomach. Between these two steps of the operation, the patient had a violent attack of bronchopneumonia, which at one time led his medical attendants to despair of his life.

A Long Fast.

The story comes from Racine, Wisconsin, that John Zacher, after an abstinence from food for fifty-three days, has at last been induced to eat. The cause of his fast, it is said, was a disagreement with his father, with whom he has since come to an understanding. The physicians of Racine say it is probable that he will recover his health. They do not look upon his fast as an absolutely genuine one, insisting that he must have taken substantial nourishment, because it would have been absolutely impossible for him to have lived so long. Those who have been with him constantly, however, say he has taken no nourishment for fifty-three days. This account of his fast may not be true, but it is interesting. Succi, the Italian faster, has certainly proved that man may do without food for a much longer period than has hitherto been supposed possible.

The Effect of the Phylloxera.

It has been recently announced by the British consul at La Rochelle, that since the failure of the vineyards from phylloxera, an imitation of claret is made there by steeping raisins and currants in water, and mixing the compound with cheap Spanish wine. In other districts of France, a spurious brandy is made from a mixture of beet-root and cheap German spirit. This is a curious commentary on the belief held not long since that Pasteur had saved the wine industry of France from the ravages of the phylloxera.

Cocaine-Lanoline.

Mr. C. J. Boyd Wallis, L.D.S., has pointed out the value of lanoline as a medium for the application of cocaine for dental purposes, and communicates the following formula to the *Journal of the British Dental Association:*

Cocaine hydrochlorate	Parts	5
Acid carbolic (pure)	"	5
Menthol	"	5
Eugenol	"	10
Lanoline	"	75
		100

The cocaine and menthol should be well triturated with the eugenol, the carbolic acid then added, and the trituration repeated; the whole may then be added to the lanoline and thoroughly well mixed. Double this strength may be employed for sensitive dentine.—*Chemist and Druggist*, July 7, 1888.

Care of the Weak-Minded.

At the sessions of the National Conference of Charities and Corrections, in Buffalo, New York, July 7, 1888, a paper was read by Dr. Isaac M. Kerlin, of the Pennsylvania State Asylum at Elwyn. He favored placing all weak-minded children of school age and women of child-bearing age in the asylums, where they could be mentally improved. The children, he said, could be made self-supporting in the industrial departments, while others received benefits from its custodial treatment.

Clinical Features of the Uric Acid Headache.

Haig, in *St. Bartholomew's Hospital Reports*, vol. xxiii, p. 201, defines this as a headache which recurs at intervals of three days to a week, or from that to one or several months, throughout a large number of years in the life of an individual. It lasts from twelve to twenty-four hours and then goes completely away until the end of the interval. The attacks are rendered less frequent and less severe by a diet poor in nitrogen. There is often a family history of headache or of gout, or both. The author has frequently found this headache associated with a large excretion of uric acid, and has noted that the administration of an acid will stop the excessive excretion of uric acid and remove the headache in one or one and a half hours. He reports several cases in full, together with a tabular arrangement of the principal features of interest. The headache is probably caused by the action of some poison in the blood (uric acid) on a nervous (vaso-motor) system especially sensitive in some parts of the cranial circulation. Strychnine is sometimes very useful in this headache, on account of its tonic action on the vaso-motor centre. Symptoms of gastro-intestinal derangement are notable by their absence. The tongue is clean, the bowels regular, food is well taken, the pulse is slow, and the temperature normal. This is in marked contrast to the frontal headache, furred tongue, fever, rapid pulse, and disgust of food, of real gastro-intestinal derangement. The sulpho-cyanide is usually in excess in these headaches occurring in gouty or rheumatic families, as Fenwick has remarked. The author then lays stress upon the alliance between these headaches and epilepsy, as illustrated by one of his cases, in which the two affections appeared to improve together under a proper diet.—*American Journal of the Medical Sciences*, July, 1888.

Glass Balls for Refilling Wine-Casks.

Wines which contain less than about fifteen per cent. of alcohol cannot be kept in casks, unless the latter are kept full and protected from the air. When a portion of the contents of a cask is withdrawn, the vintner fills it up again from reserved stock until the particular brand gives out. He then used to, and still does, resort to the practice of putting pebbles into the cask to occupy the volume of the displaced wine; but, even with the best of care, some ferruginous or otherwise impure pebbles are apt to get in, which may injure the flavor of the wine. For this reason, glass balls are now being used by many in place of the pebbles.—*American Druggist*, July, 1888.

Formula for Antifebrine.

Dr. I. N. Love (*Weekly Medical Review*, July 7, 1888) says that the following formula is a pleasant and convenient form of administering antifebrine:

℞ Antifebrine . . . . . ℈ij
Alcohol . . . . . f℥ij
Glycerine . . . . . f℥iij
Cinnamon water . . . . . f℥j
Simple syrup . . . . . f℥iij

M. Sig. One-half teaspoonful to two teaspoonfuls every two to four hours, according to age and necessities.

Examinations for Appointment in the Medical Corps of the U. S. Army.

An Army Medical Board will be convened in New York City, New York, October 1, 1888, for the examination of such persons as may be properly invited to present themselves before it as candidates for appointment in the Medical Corps of the Army.

Application for an invitation should be addressed to the Secretary of War, stating date and place of birth, place and State of permanent residence, and accompanied by certificates, based on personal acquaintance, from at least two persons of repute as to citizenship, character, and moral habits; testimonials as to professional standing, from the professors of the medical college from which the applicant graduated, are also desirable. The candidate must be between 21 and 28 years of age, and a graduate from a regular medical college, evidence of which—his diploma—must be submitted to the Board.

Further information regarding the examinations and their nature may be obtained by addressing the Surgeon General, U. S. Army, Washington, D. C.

NEWS.

—Dr. L. D. Tousely, 68 years old, died in Philadelphia, August 6, 1888.

—Professor Fritsch, of Breslau, has declined the invitation to go to the University of Würzburg.

—The foundation-stone of the new French Hospital in London was laid by the French Embassador July 21.

—Typhoid fever of a malignant type is said to be prevalent in the neighborhood of Wachapreague, Accomac County, Va.

—There were five deaths in Philadelphia from small-pox for the week ending August 4, and thirty-five from typhoid fever in the same period.

—Dr. Davis, of Whitwell's private asylum, says the *Canadian Practitioner*, August, 1888, reports the case of a woman sane only during pregnancy.

—An outbreak of typhoid fever has occurred in the Carmelite Convent at Hochelamea, near Montreal. All postulants who have not yet taken the habit were sent home.

—Dr. Bramann, of Berlin, whose name has become familiar to American readers through his connection with the late Emperor of Germany, has been recognized as *privat docent* in surgery.

—Dr. P. J. Higgins, of Wilkesbarre, Pa., declined to testify in an inquest before the coroner, unless his fee as medical expert was paid in advance. He was compelled by the coroner to give bonds in $500 to answer at court.

—Mr. Ridley, surgeon to Tullamore Gaol, committed suicide recently by cutting his throat with a razor. Since the death of Mr. Mandeville, the Member of Parliament who was confined in the gaol, Mr. Ridley is said to have been in a state of mental depression.

—Dr. Ludwid Julius Budge, Professor of Anatomy and Physiology in the University of Greifswald, has just died at the age of 77. His special studies have been on the nervous system. He demonstrated the origin of the sympathetic from the spinal cord. He also demonstrated the origin of the bile capillaries in the liver.

—At the semi-annual meeting of the Provincial Medical Board of the Province of Quebec, at Montreal, May 9, 1888 (*Canada Medical Record*, June, 1888), the examiners reported that forty-six candidates had passed. Thirty-two were rejected

upon certain subjects, and nine were totally rejected on all subjects.

Reports from Manatee, Florida, state that there have been two cases of yellow fever in forty-eight hours (ending August 6), but no deaths. Twenty possible cases have been sent to Pine Woods. Dr. Guitéras has declared that the suspicious case at Sandford, Florida, is not yellow fever. There are no new cases of yellow fever at Tampa, but there is one at Plant City.

—Dr. Henry Leffmann has been elected Lecturer on Chemistry at the Woman's Medical College of Pennsylvania, Philadelphia. The object of the Corporators in not electing Dr. Leffmann professor is said to be their desire to leave the chair vacant until it can be ascertained whether or not a qualified woman, who is also a graduate in medicine, can be obtained for the position.

—An employé in a planing-mill at Wellsville, Ohio, recently met with a peculiarly painful death while at work. He was standing in front of a "planer," when one of the "bits," a sharp piece of steel, three inches wide and four inches long, suddenly flew out of its place, striking him with great force in the abdomen and inflicting a terrible wound. The unfortunate man died almost instantly.

HUMOR.

An Anthropological Curiosity.—A double scull race.

When a thin man visits you, lodge him in the spare room, of course.—*Life.*

"I don't see why they call it vase*line*," said Bjones. "It's more like fat."—*Harper's Bazar.*

"How is that butter I sent you?" asked a Warwick grocer of a transient customer. "Better, thanks—gains strength every day."

It is reported that the dentists are taking the stump for revenue only all over the country. Politicians will have no patients with this sort of thing.—*Phila. Ledger.*

Mentor—Our idea of a strong-minded person would be one who can read the advertisement of a patented specific medicine, and yet not have the disease.—*Lowell Citizen.*

A woman in Salisbury, Eng., has been sent to prison for two years just for managing a farm. It was a baby farm, and there is no protection for infant industries under the British system.—*Ledger.*

Teacher: "Children, there is something within you that tells you when you have done wrong. What is it?" Small boy (gorged with green apples): "I know, sir. It's the colic."—*Detroit Free Press.*

"Why," said the young wife of a physician, who was given to boasting of her husband's professional skill, "he cured a patient of convalescence in less than twenty-four hours!"—*The Telegram.*

When they talked about "the nine" in Athens, it was the nine Muses. To-day, all over this country, "the nine" refers to baseball, excepting through the Middle and Western States, where it is understood to mean quinine.—*San Francisco Examiner.*

Wife—"John, dear, what would you do if I were to die?" Husband—"Don't speak of such a thing. I would be desperate." Wife—"Do you think you would marry again?" Husband—"Well, n–no; I don't think I would be as desperate as all that."—*Epoch.*

Names for Triplets.—*Truth* (N. Y.) says this is the latest credited to W. S. Gilbert: A friend was bewailing in his company that his wife had just presented him with triplets, all girls. "What am I to do with them?" asked the poor man. "I don't even know what to name them." "Oh," said Mr. Gilbert, "call the first Kate, the second Duplicate, and the third Triplicate."

OBITUARY.

JACOB H. WEHNER, M.D.

Dr. Jacob H. Wehner, of Germantown, died July 31, after an illness of three weeks. He was born in Philadelphia, February 11, 1840, and was educated at Dickinson College, Carlisle. After his graduation, he entered the Pennsylvania Medical College and received the degree of M.D. in 1861. He also attended lectures at the Jefferson College and the Medical Department of the University of Pennsylvania, and was for a time one of the Demonstrators at the latter institution.

During the late war, he was appointed Assistant Surgeon in the regular army, and for fourteen months was stationed at New Orleans. He was twice wounded on the battlefield while in the performance of his professional duties.

Dr. Wehner was a great friend to young physicians and assisted many of them into successful practice.

He leaves a wife and five children.

THE

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Clinical Lecture.

DISEASES OF THE THROAT AND NOSE.[1]

BY CARL SEILER, M.D.,

INSTRUCTOR IN LARYNGOLOGY IN THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA.

(Reported by Baldwin Gleason, M.D.)

Acute Tonsillitis.

Gentlemen: The first case this morning is one of acute tonsillitis. The patient, a girl sixteen years of age, complains that her throat has been sore for some days; that this morning her jaws feel stiff and that she can scarcely open her mouth. Upon examining the fauces, we find the tonsils red and swollen, the inflammation involving the neighboring mucous membrane. You will also notice that the tongue is coated and the breath fetid. The patient is suffering severely. She has fever, pain, and a dry sensation in her throat, which she endeavors to relieve by frequent efforts at deglutition, which is, however, very painful. Her hearing seems somewhat impaired, and the cervical glands are enlarged, hardened, and painful to the touch. Upon the tonsils are several patches of soft cheesy material poured out from the crypts of the gland. These patches somewhat resemble those of diphtheria, and hence in Germany the disease is often called homœopathic diphtheria.

In this case we shall prescribe the usual treatment, which you have already seen to bring about a cure in a few days. When a patient presents himself at the dispensary, complaining that the throat has been sore for some days, and symptoms of acute tonsillitis are present, the fauces are first thoroughly washed with my antiseptic solution Then not only the inflamed tonsils, but the adjacent inflamed surfaces, are carefully painted with a solution of nitrate of silver, one drachm to the ounce, and the following gargle prescribed:

℞ Potasii bromidi . . . . . ʒiv
Potasii chloratis . . . . . ʒi
Tr. ferri chlor. . . . . fʒiiss
Ext. glycyrrhizæ . . . . . ʒi
Aquæ . . . . . q. s. ad fʒiv

M. Sig. A teaspoonful in water every two hours; gargle and swallow.

In this formula there is a chemical reaction between the tincture of the chloride of iron and the chlorate of potash, by which free chlorine is liberated, and so acts as a disinfectant. The resulting iron salt is highly astringent, while the bromide, besides its local action, diminishes the reflexes and adds to the patient's comfort.

After all, however, it is the argentic nitrate that relieves the suffering. It is worse than useless to apply a weak solution, as it is painful and seems to act as an irritant; while the application of a solution of one drachm to the ounce produces no disagreeable sensation, but is followed by a sense of comfort. After the application, a tenacious film of albuminate of silver forms, adhering closely to the surface (doubtless containing some undecomposed silver nitrate), and thus the astringent and sedative effects of the silver are kept up for some hours. If, after that time, the tonsils be examined, they will appear paler and smaller than when first seen.

[1] Delivered to the Fourth Year Class, University of Pennsylvania.

These applications are made in the dispensary once a day to patients requiring them, care being taken that none of the nitrate of silver solution drops from the cotton swab so as to get into the larynx, where it would produce severe spasm of the glottis. Sometimes a single application will effect a cure in acute tonsillitis. In no case has it been found necessary to make over three applications, the cure being usually complete on the fourth day.

At the end of ten days, the tonsils, if chronic hypertrophy exists, may be removed with the tonsillotome or wire snare, or shrunken away by repeated use of the galvano-cautery, and a return of the disease in this way prevented. Unless this is done, the patient who has had one attack of acute tonsillitis will certainly have others.

Influence of Nasal Catarrh on the Production of Acne.

The next case I bring before you simply to illustrate what I remarked in a former lecture on the effects of nasal catarrh in producing acne and other skin-diseases of the face. When you first saw this young woman, she was suffering from hypertrophic nasal catarrh, and her face was covered with comedones and pimples. As the result of treating her nasal disease, and without any other treatment, these have disappeared. She, however, complains that a small lump or tumor beneath the scapula, owing to its position, annoys her exceedingly. Now, we not only have acne upon the face, but it attacks the chest and back as well. This, then, may be a sebaceous cyst, and we will make a little opening through the skin and remove its contents, thus for the time being relieving our patient of this annoyance, although the cyst will probably fill up again unless its sac is dissected out. Instead of the usual cheesy contents of a sebaceous cyst, however, we find this to be a hard substance. It is nearly round, of about the size of a BB shot, and evidently calcareous. Upon section, as you see, there is a hard white nucleus, with softer and darker layers about it. It looks exactly like a calculus from the urinary bladder. It may be a sebaceous cyst that has undergone calcareous degeneration, but I confess I have never seen anything like it before. As a little wound is sometimes followed by erysipelas, and gives as much trouble as a big one, we shall use here an antiseptic dressing.

Nasal Polypus.

The third patient, Isaac B., 71 years old, came to the nose and throat dispensary May 17, complaining that he could not breathe through the left nostril. On inquiry, we learned that he had had asthma for 15 years, that there was pain low down in his throat on the left side, and cough and expectoration of pellets of mucus resembling boiled starch. An examination revealed a large polypus in the left nostril, while the right nostril was large and patulous. The mucous membrane in the lower or respiratory portion was somewhat atrophied, but that of the middle turbinated bone was swollen and pressed against the septum. There was also evidence of chronic laryngitis, the arytenoids being red and somewhat swollen, and the vocal chords muddy-looking.

After two days' preparatory treatment, Dr. Gleason removed the polypus, which was hard and somewhat fibrous in character. The operation was painless and bloodless, and gave immediate relief. It was followed, however, by an increase of the asthma, which prevented his sleeping. Dr. Gleason subsequently removed as much as possible of the hypertrophied mucous membrane of the middle turbinated bone with Farnham's alligator cutting-forceps, and I applied the electro-cautery to the same region on June 2.

On June 15, the patient reported that he had had no asthma since the last operation. A few days later, he reported that he had had a slight attack of asthma the day before, and Dr. Gleason applied the electro-cautery to the middle turbinated bone of the right nostril, destroying its hypertrophied mucous membrane. This was done on June 23. Since then, the patient has reported that he has had no asthma since the last operation, and that his pain and cough have left him.

We have here, then, a case of nasal asthma and cough due to pressure upon the septum in the region of the middle turbinated bones, and the man has been apparently cured by the treatment adopted. The mucous membrane of the nose presents a fairly healthy appearance. There are no symptoms of laryngitis, and the chords have regained their normal white color. That the cure will be permanent is probable, judging from the records of similar cases. We will direct the man, however, to continue using the modified Dobell's solution as a wash, which he has been doing since commencing treatment, and to report at the dispensary from time to time.

You will observe that it was not the presence of the polypus that produced the asthma and cough. Its removal was followed by increase of both these symptoms, probably as the result of increased swelling

of the mucous membrane of the middle turbinated bone in consequence of the operation, and the consequent increased pressure on the septum. Bear in mind, it is pressure on the septum in the region of the middle turbinated bone which produces these reflex symptoms. Patients with nasal asthma ordinarily tell you that the asthma began long before there was any polypus in the nose. This is undoubtedly the case in the majority of instances, and the asthma is frequently somewhat relieved after the appearance of the polypus. In the first place, there has occurred a polypoid degeneration of the mucous membrane of the middle turbinated bone, probably as the result of a local ethmoiditis, as claimed by Woakes, of London.

The swelling of the mucous membrane of the middle turbinated bone causes pressure upon the septum, and various reflex symptoms may result from this, especially if the same conditions exist in both nostrils and the septum is compressed, as it were, between the diseased middle turbinated bodies. As the polypus grows in the confined space between the turbinated body and the septum, the pressure upon the septum also increases, and the attacks of asthma are more frequent; finally, the polypus grows so large that it escapes into the lower or respiratory sinuses of the nose, and its weight stretches and decreases the diameter of its pedicle, thus relieving pressure upon the septum. Frequently, although the breathing through the affected nostril is impeded, the asthma and cough are not as bad at the time when the polypus is discovered.

The mere removal of polypi will not cure nasal asthma. The mucous membrane of the middle turbinated bones, frequently the whole mucous membrane of the nasal cavities and pharynx, must be made to assume a healthy condition. When this patient first presented himself, the slightest touch of a probe in certain parts of either nostril and the pharynx would bring on an attack of asthma, or, at least, violent coughing. This hyperæsthesia of the mucous membrane has disappeared since the removal of the pressure on the septum and the application of the iodine and iodide of potash solution in glycerine. This has been applied twice a week in the dispensary. The formula is as follows:

℞ Iodi . . . . . gr. viii
Potassii iodidi . . . . . gr. xxiv
Glycerini . . . . . ʒj
M.

He at one time also used the iron and potash gargle as a palliative while suffering from laryngitis.

1346 Spruce Street.

Communications.

PROGRESS IN THE TREATMENT AND CARE OF THE INSANE: HOSPITALS RATHER THAN ASYLUMS.

BY D. H. MOUNT, A.M., M.D.,
BAY HEAD, N. J.

In these days of the telegraph, the telephone, the type-writer, and other instruments which we call the improvements of the nineteenth century, but which undoubtedly make us live all the faster and serve to tax the brain, it seems meet that attention and careful study should be given in proportion to the wrecks of humanity which all these economizers of time help to cause.

The statistics of the Life Insurance Company of the New York Produce Exchange are of interest in connection with this statement, for, as this is one of the oldest mercantile bodies in the country, and as it is in such places that steam, electricity, and all other devices which now enable a man to do the work in as many minutes as formerly it took so many days to accomplish are most appreciated, it probably furnishes as good an index for the purpose as can be found.

Nature seems always to provide a remedy, crude to be sure, when any injury occurs to the human mechanism; with man it remains to develop and carry out the hints so furnished.

To this are we indebted for the improvements in the treatment and care of those who have been rendered *hors de combat* by the strain produced from the methods of the current century.

Those people who deplore the passing away of the old stage-coach days, the slow post, and who think that the days of our grandfathers were more comfortable to live in than the present, are certainly right, if it cannot be shown that, as the evil has progressed, the remedy has kept pace with it. If insanity has increased, and it can be shown that the new cases received each year are out of proportion to the growth of the population, and that the recoveries are fewer, then these wishers after the "good old times" are correct.

Statistics in regard to the number and

condition of the insane will be of interest to those desiring this information.

These will show at a first glance that insanity has increased out of proportion to the increase of the population, notably in New York; but several important points must be borne in mind whilst considering them. First, the different view with which almost all people now look on the disease called insanity. Formerly it was considered a disgrace for one of a family to be known as being insane; hence such cases were kept secluded as much as possible. Instances are numerous in which families, even in very ordinary circumstances, have had small brick or stone houses built to confine an insane relative in, rather than have it noised about the county of which they were residents that they had a relative who was crazy and in the lunatic asylum. All of these cases were, of course, lost to statistics, whilst now it is a comparatively rare thing to find a concealed case, and everything gets into the enumeration. Again, from better care and improved methods of treating them, the chronic insane live longer than formerly, thus increasing the grand total each year.

Of the foreign population increasing our rate, much has been written and spoken of. That these people do increase the rate seems to be an established fact, nor can it be wondered at when it is looked into closely. Here are a number of people who have been living quietly at home with probably no ambition for the future beyond the condition of life which their fathers enjoyed. (I speak more particularly of the German rustic, for he it is who predominates among our foreign insane.) One of these hears wonderful stories about the New World; he sees a former resident of his village return for a visit who left there for America but a short time before, poor, but who now has plenty of money; he determines to emigrate; he takes the savings of his lifetime, makes the voyage, and arrives here; but what a disappointment often awaits him.

He finds, instead of the quiet village people he left at home, a multitude of people, all striving to their utmost for the almighty dollar; work he finds hard to get; his money all gone, no friends to encourage him, what wonder, then, that despair, suicide, or insanity follows? Thus, whilst had he remained at home he would most probably have enjoyed good mental health, here from worry and disappointment he becomes insane.

Much has been done in this country by alienists such as Mills, Seguin, Spitzka, Hughes, and others, so that in looking carefully over the field it will be found that, as a new phase of the disease presents itself, skill in treating it has been developed.

This is more particularly true of acute cases and of those cases which formerly were not recognized as pertaining to insanity, but which are now known as such, and by treatment a threatened attack of the disease prevented.

Blandford, in a recent address, made use of the following expressions in regard to the treatment of the insomnia in acute mania:

"When I began to practice, there was nothing but opium and its compounds; but to give opium or morphine to a patient in this stage would certainly have the effect of not producing but of preventing sleep; now there are the bromides, urethan, and numerous other hypnotics."

What Blandford calls the moral treatment has also been put in practice most successfully. Patients are now more carefully classified, and an attempt is made, with good results, to awaken a dormant sense by throwing them in contact with rational people, the Belgian plan of placing patients in the families of farmers being particularly successful.

The old custom of putting every obstreperous patient under restraint by means of apparatus has been done away with, I may say, in all the private asylums, and, where the patient's friends are able to pay for the extra attention involved, in most of the large institutions also; some of the more advanced ones maintain that they have no restraining apparatus about the place.

Whilst the writer was junior interne in a large New York hospital, there were numerous surgical dressings to do, and he found that in order to get through the work between 9 A.M. and 1 P.M. his time must be economized. Soon it was seen that, among the more painful dressings, time could be gained by carefully observing the patient. It was found that when the patient expressed his feelings by making great outcries whilst the dressing was being done, that on the completion of the dressing he was in good condition; per contra, it was found that those patients who said not a word, but who bore pain with firm-set jaws and white contracted lips, needed more attention afterward and really suffered more and were worse off than those who had made so much noise. It was felt that it was with the one who was making the noise as if the surplus steam was going off through a safety-valve; while with the other, as if the safety-valve had been

tied down, and an explosion imminent at any moment. With the insane who are being restrained, the same thing is undoubtedly true; their sufferings from their delusions causing them quite as much pain as if everything were true which they imagine.

A patient in my care, whose father is the owner of a palatial residence just outside of New York, one night went to her window and declared she saw her father's house burning. She described the different phases of the fire, and called on imaginary people present to save her father and mother from the flames.

Of course, soothing measures could avail nothing in such a case as this, but grs. lx of sodium brom. were given by force, after which the patient was allowed to move about the room as before. In an hour, an additional 60 grs. were given in the same manner, which was followed soon after by a complete quiet, and finally sleep. Formerly, in a case like this, the straight-jacket would have been used; but would not such treatment have put the patient in the same position as the one with the firm-set jaws mentioned above—or, in other words, would not the safety-valve have been tied down? On another occasion, when this same patient was in a "walking mood," and when it seemed proper to take some active measures to get her in a recumbent position because of the swelling of the feet and legs, and when she was observed leaning against the wall asleep, it seemed an opportune moment quietly to move her to her bed, and, by using mild force, get her to remain there. This was accordingly done, but with the opposite effect from that desired, for almost at once she became aroused, and, the longer she was held, the more violent she became, until it was seen that no good could be accomplished. Here, again, the bromide of sodium was given in large doses and with the same good effect as before.

In the old days, when, as Blandford says, they had nothing but opium and its compounds, and when a patient was in such a condition, restraining apparatus would surely have been used because there would have been nothing else to have resorted to—would not she, almost to a certainty, have had an attack of acute mania? As it was, the bromide put her in a profound sleep, which lasted for some hours, on waking from which she ate the food which had been placed at her bedside, and then again went to sleep to awake at intervals and take her food as before.

In such cases, the disposition among the more advanced teachers is to give the patient the greatest amount of freedom consistent with safety.

In quite similar cases apparently, but where the patient's brain was anæmic, the writer has procured quite as good an effect from the administration of small doses of either alcohol or opium. When the ophthalmoscope can be used, the differential diagnosis between congestion and anæmia is, of course, easy; but where the patient persists in keeping her eyes closed, or will not keep quiet, this means of deciding is out of the question, and the other physical signs must be the guide. These, however, cannot always be relied on to a certainty, for the anæmic patient will often have a fair pulse, and, more often than not, a flushed face. This treatment of congestion and anæmia is well illustrated in the headache of the sane. Their anæmic headache is cured by ammonia, a good dinner, or some other kind of stimulant, whilst the bromides take care of the congestive form. As progress has abolished for the most part some kinds of restraining apparatus, it has also brought other kinds into use. One in particular, which prevents the habit of self-abuse in the female, is worthy of mention.

None but those who have had such patients under their care, and who have tried hard to have them stop their habit, can have any idea what a relief an apparatus of this kind is, for, however much the patient may wish to prevent it, she oftentimes yields to temptation if left alone at night, and in a short time may undo the good results obtained after weeks of care. The apparatus is not a disagreeable one, and is worn readily at night by those particularly who are afflicted with sub-acute melancholia and who wish honestly to break themselves of the habit. This is a great advance, because to remove, or in a measure control, masturbation in the female is to remove a potent cause for insanity.

The giving of food forcibly to those who, with suicidal intent, refuse nourishment has been done away with by many, it having been found by close observers that if food is kept constantly before this class of patients, and if it is replaced by fresh food at regular intervals, whether the first has been touched by the patient or not, they will, if not too closely watched, steal a small quantity of it and eat it; then, if no notice is taken of it, in a few hours they will take more, until finally they will in a short time be found eating their full ration. What Blandford calls "judicious neglect" is, I think, very

applicable in such cases. I quote a typical case from my history-book:

Monday, Aug. 20.—Patient took breakfast as usual this morning, but at dinner refuses everything and declares that "her insides are all gone" and that she could not take anything even "if she *dared* to."

Tuesday, 21.—Absolutely refuses to dress herself or be dressed; pulls clothing off as fast as put on; breakfast with cup of milk left in room. 1 P.M.—Has taken no food; breakfast removed, and dinner with fresh cup of milk put in its place. 4 P.M.—Whilst unnoticed has drank cup of milk, which was replaced at once by more. 6 P.M.—Dinner removed and replaced by supper.

Wednesday, 22, 6 A.M.—Milk has disappeared; more milk placed in same manner, which also disappeared as soon as patient could take it without being observed, which was in a few minutes; more milk supplied and breakfast taken in room at regular time, the supper of previous night being then removed. 9 P.M.—During the rest of the day, the same process was gone through with as before, the patient taking three cups of milk when unobserved, but leaving the other food untouched.

Thursday, 9.30 A.M.—Whilst thinking herself unobserved, patient has eaten everything which was taken in for breakfast, not leaving a scrap of anything. Dinner was eaten in the same way, and long before supper-time she asked how soon it would be ready.

In pursuing this plan, great care is taken to have the food changed at the proper intervals, and that it should be made as tempting as possible, not only to the sight, but also to the sense of smell. I have heard patients say, when a savory dish was being carried in by an attendant: "It smells good, but I must not eat it."

Former habits and tastes bear looking into, in this respect. I have had a patient who took nothing but ice-cream for several days. It was supplied to her, all she would take, and it was good, too, according to her estimate for its taste; but the doctor watched it, because it contained albumen, starch, sugar, etc., and he was well satisfied. Of the different medicines used, hyoscyamus and its alkaloids stand in the front rank, whilst others are being constantly tried and put among the feasible remedies. One thing seems worthy of note, and that is that heroic doses, given at long intervals in the disturbed cases, are of more avail than small doses given frequently. Hypodermic medication may be made useful in the future, and cranial surgery is pushing to the front and received with great favor. Whatever progress has been made in the treatment and care of the insane in the public lunatic asylums is, I firmly believe, comparatively little compared with what will be done in the near future, if all signs are true.

Dr. Hughes, of St. Louis, in a short but able article in the *Alienist and Neurologist*, January, 1888, calls for the separation of all political influence from the State lunatic institutions, and gives the best of reasons therefor.

Suppose we go still further and ask for lunatic hospitals conducted on the same plan as any other hospital, where a regular house staff could be admitted by competitive examination, and the hospitals located near enough to the cities so that specialists could be of the visiting staff and constitute the examining board. This would do away with political influence for the most part. Take, for instance, Bellevue Hospital, New York, for if there is any place in the world where political influence reigns supreme it is in the city of New York; yet be it said to the credit of the hospital that the man who comes up for examination, among the large number who usually come before the examining board for the few positions, knows that his knowledge of medicine will get him the coveted position, not his fine appearance, his money, or political influence. Could every city or town in each State which is large enough to have a hospital have a department for the insane attached to it, where the conditions as regards the visiting and house staff could be as before mentioned, I believe that much progress could be made, because the hospitals would be smaller than the asylums; the patients would therefore be more directly under the care of the house staff, for there would be fewer to look after, and much that is now left to the observation of attendants for information could be obtained by the house staff itself. The specialist would be benefited, because he would have opportunities of observing patients during the whole course of their illness, many of whom are now as a closed book to him, once he has sent them to an asylum, and for the same reason the patient would be benefited, because the specialist would have a wider field of observation.

In following out this plan, the asylums could be used as hospitals for the incurables. In general surgery and medicine, we have our hospitals for incurables, and why not have the same for the insane? As it is now,

the acute cases of insanity and the incurables are all sent to the same institution. What would be thought of the medical man to-day who would send a case of pneumonia to the home for consumptives, or a fracture to the hospital for incurables? And yet is not that what we are all doing with our acute insane in this the nineteenth century?

That the asylums are overcrowded, and more work is given the medical men to do than they can observe closely, instance the experience of the New York *World* reporter who stayed a number of days in an asylum and wrote a lengthy article thereon, which brought unfavorable comment on the management of the institution from the public. Could such a thing have happened, had the conditions been such as have been suggested? Could this reporter have accomplished the feat so easily, had there been three medical men looking after, say, one hundred patients in their division, and a "visiting" staff going the rounds once a day? Of the practices of hospital beats, every "hospital man" is familiar; and whilst I have seen them admitted to the wards either through hasty judgment or curiosity to see "how they did it," my experience is that, however well simulated their trouble—and it is often as well put on as the reporter's—they seldom remain longer than one day. During my service, a patient was brought to the hospital by an agent of one of the merchant princes of New York, who, through a salaried man doing nothing other than looking after the sick poor, took this means of distributing his charity in an unostentatious manner.

The patient was supposed to be suffering from hemiplegia, and all the signs pointed to that as a correct diagnosis; but something about the appearance of the patient led to a thorough test being made; something led to the belief that she was a sham.

Etherization was accordingly ordered, as the most sure means of making the diagnosis. The patient, on hearing this, protested most vehemently, and, as her protests were not listened to, had the agent take her from the hospital. The agent, an old man, in a few weeks returned and apologized for the trouble he had made (for he was most emphatic at the time in his recommendation of the patient—"she was his old Sunday-school scholar," etc.), and said he had been completely deceived, for, on calling to see her a few nights before, he had found her drunk, and that for some fancied slight she had caught hold of him and forcibly ejected him from the house. All "hospital men" will recall instances of similar kinds. Of the asylum men, their opportunities of observation must necessarily be not so great, because two medical men looking after, oftentimes, from 700 to 800 patients (for the superintendent can in such a large institution have little or no time for medical work) must find it impossible to make the finer distinctions; and, as before mentioned, the attendants must be relied on chiefly for information. The writer is aware that there are at least three institutions in the country conducted somewhat on the plan suggested. That is to say, they are branches of general hospitals; but, unfortunately, the customs of a hospital, in regard to the visiting staff and the house staff, are not carried out.

Space forbids here any full discussion of such a fruitful subject; but it is hoped by the writer that the hint furnished may lead to some good, and that if his suggestion of small hospitals for the insane, instead of large asylums, should meet with the approval of others, the proposition may be put in practice and brought to success.

DIAGNOSIS OF SCARLET FEVER.

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There are changes and modifications being wrought in diseases from year to year, and pathological conditions are modified by the circumstances attending and present in each case of disease; this doctrine now believed to be as true as that the evolution of an animal with new anatomical features may be a creation of new environment. It is hardly necessary, in support of this, to more than call attention to the numerous diseases of ancient times, to which the present generation are not subject; and one need only refer to the few new diseases of the past century, to which the previous medical history of the world furnishes no analogue. When one looks back in review over the various modes of living of the human animal, and considers how great the change has been from the habits of life of man in the high civilization of this age, as compared with those in which he was created, or those even in which numbers of the race still live to-day, it seems no more remarkable that his diseases should be modified by these circumstances than that there should be greater differences (physically) between men than between some of the human race and the monkey.

The individuality of each case impresses itself more and more each day on the prac-

ticing physician, and he is often puzzled to know just what answer to give when accosted by an anxious friend of his patient with the inquiry "What is it, Doctor?" For the case is not typical (so very few are); there are features like those of typhoid fever, and yet the whole aspect of the case will not warrant the proper use of that name, or in fact of any but that execrable expression "A complication of diseases," behind which barrier one retires to wait, like Mr. Micawber, for something to turn up.

Even those diseases which under ordinary circumstances seem so easy of recognition may be masked by unusual features, so that there may be no knowledge attainable of some of the circumstances of the case, such as exposure to contagion; and we lose valuable time in treating the first cases in an epidemic by waiting for the typical signs.

The above is only a preface to the history of some cases of scarlet fever presenting anomalous symptoms, and is offered simply as a suggestion that this disease may be undergoing a modification in its characteristics at the present time, just as typhoid fever is by some believed to be doing in certain malarious portions of this country.

Dr. Woodward, in his paper before the Medical Congress at Philadelphia in 1876, suggested the name typho-malarial, which has been found to be applicable to many cases, and has been very generally adopted throughout this country in order to mark a disease which is different in some respects from the characteristic typhoid fever. "According to Mayer, the merit of having shown measles to be a malady distinct from scarlatina must be ascribed to Forester and Sydenham. It is not clear, however, that the two diseases were accurately differentiated till the close of the last century, and notably by Withering in 1792." [1]

These two diseases, it is said in most text-books upon the subject, are now so clearly defined and differentiated that no mistake should be made in recognizing them; but that cases may occur early in an epidemic, or when no exposure to either disease is known to have occurred—cases which defy absolute recognition—has been maintained as a fact by deeper thinkers and closer observers than your essayist; and this position can but be supported by two of the cases cited below.

The first of these cases for which medical attendance was asked was that of a child five years old. He had been complaining for a few days, and had an eruption which was supposed to be measles, and which so resembled the eruption of measles that it was pronounced to be this disease by a physician. The case presented the coryza, congested eyes, and catarrhal bronchitis common in the early stage of measles, and the eruption presented none of the efflorescence or diffused scarlet-blush of scarlatina, but, on the contrary, was distinctly maculated and was of a dull or deep-red color, disappearing on pressure; the tongue was not the strawberry tongue of scarlatina, and, while there was sore throat, it was no worse than is often found in measles, and moreover had no appearance on the uvula or elsewhere to lead to any opinion but that the case was one of measles and of no more than ordinary severity. The child was one of a family of four children living in the country, and had not been off the farm or had young company for many weeks, and had not been exposed to any contagious disease of any kind. The other members of the family were supposed to have been free from any exposure also, though a boy and girl of the family came into the city of Trenton to school every day.

This was the state of affairs as presented to the attending physician on Monday, February 13, 1888.

The case progressed favorably, without any untoward symptoms or any indications of being more than an ordinary case of measles, until Thursday evening. The breathing then quickly became difficult, there was tumefaction about the neck, and the symptoms became alarming. Friday morning found the conditions materially worse, the throat being covered with a diphtheritic membrane and the case presenting all the throat-symptoms of a malignant scarlatina anginosa, with fetid breath and an excoriating discharge from the nose. The tongue was brown and covered with sordes. The child struggled for breath through the day, and died near midnight.

On this day (Friday), an older son was taken ill with sore throat and an eruption, having had a slight chill the day before. He had a strawberry tongue, and the soft palate was characteristic in appearance, and so was the eruption a day later. He had a typical scarlatina, which ran the usual course to recovery.

A day or two later, an older daughter also began with the disease, but the signs (eruption, etc.) were not so marked. It was a regular case, and advanced slowly to recovery.

[1] Pepper's System of Medicine, vol. i, page 557.

Now, to go back and trace the means by which the disease was brought to this house leads us to the consideration of a second case, presenting the disease in an unusual form.

The remaining child in this family was a girl 13 or 14 years old, going in the city to school every day before this outbreak. A close examination of this child led to the discovery that there was a slight desquamation going on about her wrists; her face was puffy, and an examination of her urine showed albumin, epithelium, and a few epithelial casts.

Questioning developed the fact that for a day or two in the preceding week she did not feel well, had a slight sore throat, and stayed away from school, and at the house of a relative in the city. She did not see any eruption or know that she had any, nor did the sore throat last more than a day or two. She took no medicine, and went home on Friday (February 10), three days before the little boy was taken sick. Albumin was present in the urine of this patient for a week or two, disappearing at times for a day or two, and again appearing; there was œdema of the face, headache, loss of appetite, etc., but all soon disappeared and she was soon well.

She unquestionably was the medium by which the other cases were established, and it was shown that she had not been exposed to the disease, so far as she knew, excepting in passing at school a girl who had had it three weeks before, but who had on the same dress on returning to school that she had on when going home sick; there had been no contact, but simply a passing of each other in going about the school-room. It would be interesting to know with how much care this clothing had been disinfected or aired, but it can hardly be doubted that the period was too short in which this young girl was allowed to return to school, after being ill with scarlet fever, to be shut up for a whole day with a number of susceptible young people.

The fifth case was in the house of the relative in Trenton, at which the patient last spoken of staid for a few days while indisposed, and was so unlike typical scarlatina as to lead to great doubt in the mind of the attending physician that it was truly this disease, though he had seen the patient frequently, and was on the watch for it because of the known exposure. The child remained well for fourteen days after exposure, and was considered past any chance of being ill, as the ordinary period of incubation is so short—three to seven days—and may even be very much shorter, as the next case will show. On about the fourteenth day she had slight rigors, and on the next day a slight rise of temperature, with a faint blush in the throat, which was very little sore. She also had an indistinct and ill-defined rash on the skin, under the clothing only. These signs soon disappeared, and, without other symptoms, the recovery was established. Taking into consideration all the facts, this was considered a case of scarlatina, and was, in my opinion, very properly quarantined for some time as such and reported to the Board of Health. But what a different view of this case might have been taken, and how grave the possible consequences, if the history of exposure had been less clearly known.

Case six is of a kind unique in the experience of those physicians to whom it has been cited, and in my own, though similar cases have been reported and may have occurred quite often without being known as having originated in so direct a way, *i. e.*, by inoculation. The patient was about 48 years of age. He had had cardiac asthma and a catarrhal bronchitis for a year or more, accompanied with tickling in the throat and annoying cough at night, with little if any expectoration. The uvula was found greatly elongated and relaxed so that it dragged down on the base of the tongue and against the posterior wall of the pharynx when the patient was in a recumbent position. On Tuesday, February 21, 1888, an effort was made to amputate the uvula. Forceps were fastened on it, but so much nausea was induced (he vomited his breakfast in my office), and the throat was so sensitive, that the effort had to be abandoned. The next morning, with the aid of a spray of a two per cent. solution of cocaine, the amputation was easily accomplished, and without pain or unpleasant symptoms, such as occurred the day before.

The next day he had pain in the back and legs and head, no appetite, nausea, and toward evening a severe chill. The throat presented a scarlet appearance and was quite sore. The next day, Friday, he vomited freely, had great pain in his throat, which was intensely inflamed and had a diphtheritic patch on the stump of the uvula. In the evening he had a temperature of 102° and was covered with an eruption characteristic of scarlatina; pulse 130. This patient had the disease severely in a typical way; it ran a regular course, and recovery followed in due time without accident or complication.

excepting that there was albumin in the urine one day, and an abundance of epithelium all through the stage of desquamation from the skin; this, however, cannot be an unusual occurrence, as no doubt the epithelium of the mucous membranes that have been covered with the eruption is thrown off just as the epithelium of the skin is. He had not been exposed to scarlet fever in any way excepting through me, the cases above related, with one exception, being in my charge at the time.

The atomizer, scissors, forceps, etc., had not been near the other patients, but a pocket tongue-depresser used in his mouth when the amputation was done had been used in the mouth of the boy that died, five days before, when the disease was still supposed to be measles, but not since. It had been washed frequently and used in other mouths meanwhile, and no trouble had resulted in any case, though it had been in the mouths of children, and it is my firm belief that there would have been none here if the operation had not been of a kind to open the mucous membrane. Evidently this case was one of inoculation; this opinion is supported by the short period of incubation (thirty-six hours) from the time of operation to the time of chill, and by the fact that the patient had long passed the age when there is ready susceptibility to the disease.

I had not been in the presence of scarlet fever patients for more than forty hours before the amputation was done, and it seems hardly likely that the disease was carried by my hands or person, more especially as my hands were not in the mouth, nor was anything else but the instruments named.

This series of cases presents some unusual features, and it is easy to make practical deductions from them which may be useful in the conduct of other cases, for it is only by a careful observation of the unusual features in a disease that we can hope to be prepared to meet and conquer emergencies as they arise. 1. Scarlatina often deviates from the true type, as we know it, and may be so masked as to resemble another disease so closely as to make the differential diagnosis very difficult, or even impossible in its early stages, and sometimes in any stage. 2. The danger of contagion from these cases is increased greatly, and the fever contracted in this way may be of a severe and fatal kind, so that 3, this is a disease we should exercise unusual care in detecting and quarantining. 4. The disease may be inoculated when the virus has access to the blood, and more than ordinary care in cleansing instruments such as the tongue-depresser and thermometer is required, and there should be thorough disinfection before their use in any surgical operation. The same disinfection is necessary also before obstetrical cases are attended. 5. Careful and frequent examination of the urine for albumin, epithelium, and casts is a valuable diagnostic measure, and may forewarn the attendant of approaching danger of uremia, and may save a sudden fatal termination of the case when it is supposed the patient is convalescent.

AN OPERATION FOR STRANGULATED INGUINO-SCROTAL HERNIA.

BY B. BRABSON CATES, M.D. (UNIV. PA.),
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Sam Curtis, man, white, æt. 40, laborer in a steam saw-mill, has been troubled with hernia since he was ten years old; has never worn a truss, and never had any difficulty in reducing the protrusion until June 12, 1888, when, after some heavy lifting, the hernia came down and defied all his efforts to replace it. He said nothing about his trouble, but kept at his work, suffering with pain over the tumor and in the region of the umbilicus, and with constipation and tenesmus, until early in the morning of June 14 He was then seized with nausea and vomiting, and the pain increased so that he was compelled to seek medical aid. My friend, Dr. J. W Hannum, was summoned, but, owing to the fact that the patient lived at a considerable distance in the country, did not get to see him till about 10 A.M.

Having failed to effect reduction after trying all available means, Dr. Hannum courteously summoned me to see the patient with him in consultation. I found the man in the afternoon of the same day, living in a small cabin, the hygienic surroundings of which were deplorable. His face was flushed, his features pinched, his eyes bright, his mouth dry, his tongue furred. He had considerable thirst His bowels were constipated. He had slight fever. His pulse was small and rapid, and his respiration was accelerated. On examination, I found on the right side a smooth, oval, tense, semi-elastic tumor, tympanitic on percussion. The scrotum on the same side was greatly distended and so very tense that it could scarcely be indented by very firm pressure, while the tumor extended well out along Poupart's ligament. I diagnosticated an inguino-scrotal enterocele with some of the

characteristics of an inguino-crural hernia, inasmuch as while the scrotum was distended to its utmost, an additional loop of intestine descended and protruded outward along the folds of the groin, as was proved by a subsequent dissection. I employed judicious taxis, remembering the injunction laid down in Prof. Ashhurst's surgery that "if a moderate and cautious employment of the taxis does not afford relief, the sole hope of safety lies in the use of the knife." Taxis did not make the slightest impression on the tumor.

Dr. Hannum and I then agreed to etherize our patient, with the understanding that, should we fail to reduce the hernia, we were to operate, a determination which was accepted by our patient. Having fully etherized him, and employing taxis to no avail, Dr. Hannum asked me to operate, which I did, cutting directly down upon the tumor in its long axis, so that, as recommended by Prof. Ashhurst, the position of the external ring would be a little above the middle of my incision, which was about three inches in length. I picked up each layer of tissue and divided it upon a grooved director until I relieved the stricture in the neck of the sac. I performed the ordinary operation of opening the sac, having first tried Petit's method. I found the bowel considerably congested and swollen. Dr. Hannum then reduced the bowel and stitched up the wound, dressing it strictly antiseptically. Strict antisepsis was observed both before and after the operation.

The patient rallied well, but complained of slight pain in the region of the umbilicus. We left him late in the afternoon, with strict orders as to diet, and the use of opiates should the pain continue; but, happily, opiates were not needed.

I saw him the following day about 10 o'clock A.M., when his temperature stood at 100.1°; his pulse was 104, and his respiration 18, while the pain had disappeared from the region of the umbilicus. His tongue was coated yellow; his bowels had moved four times during the night. To check this, I ordered opiates. June 16, at 2 P.M., his temperature was 100.1°, his pulse 82, his respirations 15. His tongue was still furred and his bowels had moved twice. June 17, at 2 P.M., his temperature was 99.3°, his pulse 75, his respirations 15. I now drew off his urine, which was scanty and high-colored. His bowels had not troubled him. June 19, his temperature was 99.1°, his respirations 14, his pulse 72. His bowels had not moved and his kidneys were acting well. June 22, his temperature was 98.1°, his pulse 66, his respirations 15. June 26, his constitutional symptoms being normal, and the wound having thoroughly healed except at the lower end, which showed a place the size of a pea, which would have to heal by second intention, I fitted him with a truss and dismissed him as cured.

The treatment during the first four or five days subsequent to the operation consisted in enforcing absolute rest on the back in bed, not even rising to respond to the calls of nature; with the use of a simple milk diet at first, and afterward an allowance of chicken broth and a little of the white of the chicken. When I dismissed him, I allowed him to return to a mixed diet.

It seems clear to my mind that this case tends to confirm the general opinion of surgeons, that a cutting operation, with the advantages of modern antiseptic methods, should be undertaken whenever a hernia does not yield to comparatively gentle taxis, and that the prospects of a patient are much better where the sac is opened than when the hernia is restored without doing this.

TYPHOID FEVER A CONTAGIOUS DISEASE.

BY JAMES W. PRICE, M.D.,
FORT SMITH, ARKANSAS.

That form of fever known among medical authors as typhoid fever has in it certain symptoms which may be easily and readily defined; to go into a description of its diagnosis and prognosis would be foreign to the object in view in addressing you on this occasion

The point which presents itself more forcibly to my mind, the one upon which I shall base my argument, is: "Is Typhoid Fever Contagious?" Can it be transmitted from a typhoid patient to another person who may be brought in contact with the case, but who at the time is in health and free from any form of indisposition whatever? I am aware of the fact that the conflicting opinions among the medical fraternity upon this peculiar and interesting subject have been discussed elaborately for years; but if there has ever been a definite conclusion reached I have yet to learn of it, though I have had an experience of some thirty or forty years in the profession. Each man assumes that his views are right and that his conclusions are based upon strict medical science. After investigating authors upon the subject and summing up the evidence, I am forced, from an honest convic-

tion, to believe that typhoid fever is clearly a contagious and infectious disease, and may be imparted to others who are totally free from any fever-germs. Dr. Flint says: "With respect to the contagiousness of the disease, there has not been unanimity of opinion. That it may be communicated under certain circumstances is certain, and that it frequently or generally originates spontaneously, irrespective of contagion or infection, is perhaps equally certain."

While acting surgeon in the Confederate army in the year 1860, my regiment was stationed near Savannah, Ga., upon a high dry pine-barren, with no swamps or lagoons from which could have possibly arisen malaria or miasm sufficient to have produced typhoid fever (I suppose some of the latter-day saints would have termed it typho-malarial); and yet we had, in a few days, some nineteen or twenty cases of genuine typhoid fever. Having railroad facilities at my command, I decided to send my patients home to their friends among the mountains, where they soon recovered and returned to their command. But now for the sequel. The report came back to the surgeon from the friends of these patients: "For God's sake, never send any more typhoid-fever patients home, as the disease has spread throughout the neighborhood." The conclusion is inevitable, that the typho-malarial hobby was exploded by the result which occurred on this occasion.

Flint says: "The contagiousness of typhiod fever is proved by instances in which persons, having contracted the disease in one locality, go to another in which the disease was not prevailing, and, of the residents in the latter locality, with whom they are brought in contact, a greater or less number become affected."

The contagiousness of this disease, either from direct or indirect causes, may be inferred from a writer in the *Medical Press*, who says that, in the examination of a certain barracks where this disease had prevailed, it was "ascertained that three of the recent cases had used the clothing and bedding of men that had been attacked. This led to closer examination of the clothing, and it was then discovered that the linings of the trousers were, almost without exception, soiled by dried fecal matter, of which a part probably had its origin in typhoid fever."

I have endeavored, in a succinct way, to present my views, trusting I might add something which may lead to investigation and draw out some eminent Boanerges who will enlighten the world upon the subject.

Society Reports.

PHILADELPHIA CLINICAL SOCIETY.

Stated Meeting, April 27, 1888.

The President, Dr. Mary E. Allen, in the chair.

Dr. Clara Marshall read a paper entitled

A Report of Two Cases of Chorea Occurring During Pregnancy.

Case I.—Sallie M., 18 years old, single; menses established when 13 years old, always regular. Chorea was developed at the age of 10, increasing in severity (though to a more marked extent during pregnancy) until the time of her admission into the wards of the Philadelphia Hospital, in March, 1883. She attributes the chorea to mal-treatment at the hands of a relative, who was her caretaker. At the time of her admission into the hospital, the choreic movements were violent to the last degree, the patient not having the slightest control over herself, and the movements being sufficient to prevent her remaining in bed without restraint.

As the patient was pregnant, the advisability of terminating the gestation was considered; but finally she was transferred to the nervous wards, where, under the care of Dr. Charles K. Mills, she slowly but decidedly improved. The treatment, while in the nervous wards, consisted in the administration of antispasmodics and tonics: a combination of potassium bromide, with conium juice and liquor potass. arsenitis, was the principal medication. Careful attention was also paid to the diet, and stimulants, in the form of milk punch chiefly, were given.

The choreic movements were not present during sleep. The patient asserts that she was not conscious of being brought to the hospital, and that she did not recover consciousness until after she had been transferred to the medical wards. She was returned to the obstetrical ward June 7, 1883, at which time the choreic movements had almost ceased, and in this respect she remained in about the same condition until delivery. She was delivered of a child, weighing 5.8 lbs., June 24, after a normal delivery. June 30: Patient's general condition good; bowels regular; tongue clean; her hands lie perfectly still, except when attention is called to them, when they twitch slightly. She sleeps well; is taking no antispasmodics.

The lying-in period was normal; the convulsive movements disappearing entirely. She left the hospital in due time, taking her baby with her. Nov. 24, 1885, Sara M. was again admitted, with her second baby, æt. 5 days; no chorea. She was discharged Dec. 24, 1885, at which time mother and child were in good condition.

Case II occurred in the practice of Dr. Laure Hulme, of West Chester.—W. S., æt. 24; married; three children; youngest three months, oldest three and a half years. The chorea dates from the first pregnancy, lasting through each pregnancy, with slight improvement after delivery. The second delivery was a breech presentation, with still-born infant. No improvement followed this second delivery, as she almost at once became pregnant for the third time. There was at this time much nausea, which prevented the retention of medicines by the stomach. She could not stand alone, and walked with great difficulty; her arms and hands went through certain irregular movements before she could use them to carry out her wishes; the tendon reflexes were exaggerated; pupils responded normally to light; appetite good; bowels regular; no albuminuria.

She was delivered in July, 1887 (the labor being short and easy), after which she began at once taking ext. cimicifugæ fld. ʒ iij–ʒ iv a day, upon which she decidedly improved; she could walk very much better, but was not quite steady upon her feet, had to make several ineffectual attempts before being able to co-ordinate her movements. She continued to improve under the administration of cimicifuga. Her speech, which was much impaired when first seen, soon lost this feature, except occasionally; the facial movements began to be slight and ceased to be constant; uterus and appendages normal; heart's action regular; no sensitive point on spine; the insomnia disappeared, as well as the twitching during sleep. It might be stated here that, although there was no history of chorea previous to marriage, yet the patient had always been very nervous. Different remedies were tried in the case—hyoscyamus and Fowler's solution being the principal ones; all seemed useless until cimicifuga was given a trial, which proved beneficial.

As to the causes of chorea of gestation, Barnes says that it is doubtful whether chorea arises in the course of gestation, as a new disease. In case first it was a disease of childhood (partly aggravated by gestation). In case second it first manifested itself during pregnancy, though the patient was one with a nervous diathesis, which is insisted upon by Barnes as a foundation for chorea of gestation, where there has been no chorea of childhood. Since chorea involves danger to life of fœtus and mother, the question of terminating the pregnancy comes up (especially in the interest of the mother). Nature often solves this problem, and sometimes, even then, through procrastination, the mother's life may be lost. Barnes reports nine fatal cases; in five of these premature labor set in spontaneously, in four it was induced.

Besides medication and induction of premature labor, dilatation of the cervix uteri has been tried by Dr. W. F. Wade (Physician to General Hospital, Birmingham, England). In this case potass. bromide, tinct. valerian., chloral, cannabis Ind., were used without benefit; finally dilatation of the cervix was resorted to, under chloroform. Total amount of dilatation, 2½ inches. This was followed by steady improvement; there remaining only a slight twitching of the fingers of the right hand, and a little fidgetiness when watched, which disappeared after the birth of the child. Chorea may end in mania or melancholia, but even then the case is not hopeless, always. A case under the care of Dr. Charlton Bastian is entitled "Chorea during Pregnancy; semi-maniacal attacks, melancholia; recovery under the use of opium." In this case chloral and the bromides were first used, without avail.

Stated Meeting, May 25, 1888.

The President, Dr. Mary E. Allen, in the chair.

Dr. Rebecca Fleisher presented a paper entitled

Some Facts Concerning the Present Epidemic of Small-Pox in this City,

and said: There is at the present time, as all are no doubt aware, an epidemic of small-pox in this city. The origin of contagious diseases is always interesting, and often instructive, even though the knowledge serves no other end than to demonstrate, over and over again, to a careless community, that the introduction of such diseases is, in almost all cases, preventable, even though their spread is not always so.

It may also stir up public sentiment in favor of increased exertion by health officers and others, that these may have the community supporting them, even if extreme efforts

should seem imperative, in order to meet the end of protection to the city from a great calamity. But it is not only useful as general information and for public use, but the physician sees in the isolated cases, following each other successively, their utter and complete dependence on contagion to induce the disease, and thus, over and over again, is illustrated the characteristic history of epidemics, as to their origin, mode of dissemination, and course.

This epidemic originated from carelessness in not recognizing an eruption possessed by a passenger on board the steamship Lord Clive, from England, arriving here February 1, 1888. This eruption was noticed, but not diagnosticated, before he left the steamer. The passenger obtained board at 2024 Garrett Street, in the southern section of the city, Twenty-sixth Ward; remained there two weeks, and then went West. His soiled clothing was laundried by a woman on Forty-first Street, West Philadelphia, who later became ill with what the physician called *measles;* and it was only after she had been ill for a week that the true nature of the disease was recognized. She was then sent to the Municipal Hospital, where she died March 11. This woman's brother-in-law, living in the same house, had *varioloid;* these were the only persons in this district who were affected. On March 10, a new boarder at 2024 Garrett Street (the house in which the passenger from the Lord Clive lodged) was placed in the bed occupied by the emigrant, no change of bed-clothing having been made; this man became ill and was sent to the hospital. Later another boarder at the same house became ill, but desired to be nursed at his own home on Moyer Street, Thirty-first Ward, in the northern section of the city, and thus carried the disease there.

It was later learned that two other boarders in the Garrett Street house had varioloid, but the cases were not reported at the Health Office.

From March 11 to the 19th, there was no death, but on this latter date a patient from St. Mary's Hospital died.

The rapidity of the spread of the disease was not very great at first, although new cases were reported each day. The course of the spread has been erratic, beginning in the southern, then extending to the western, and then to the northern section of the city. The wards then in turn affected were the Twenty-sixth, Twenty-fourth, Thirty-first, Fourth, Eighteenth, Thirtieth, Third, and so on. The only wards, six in number, until now exempt, are the First, Sixth, Eleventh, Sixteenth, Twenty-first, and Twenty-second. The Second Ward heads the list with thirty reported cases, nine of these being in one house on Temple Street, near Twelfth and Fitzwater. There was no doctor in attendance, and a relative, unconscious of the disease, reported at the Health Office the fact of a boy having been delirious for four days. On a visit to the house, seventeen people were found crowded in three rooms; twelve of the number were sent to the Municipal Hospital, although three of them did not develop the disease. Of the nine who were attacked with small-pox, four died.

The total number of cases reported until within a few days was 176; 81 of these were sent to the hospital; of this latter number, twelve died. Of the 95 treated in their own homes, seventeen died.

Without definite data as to the comparative severity of these two classes of cases, those treated at the hospital and those at home, and with so small a number from which to draw conclusions, it may nevertheless be interesting to note that of those treated in the hospital 14.8 per cent. proved fatal, while of those treated at home 17.8 died. Considering the disadvantages, in a mortality sense, of moving patients ill with any infectious disease, this certainly speaks well for the management of the hospital.

Mary Willits, M.D.,
1527 Green Street. *Reporting Secretary.*

Periscope.

Case of Vaginal Lithotomy.

Dr. W. Winterberg, of San Francisco, in a communication to the *Pacific Medical and Surgical Journal,* June, 1888, says that, considering the rare performance of this operation, a detailed account of the following case may not be devoid of interest. Mrs. McM., fifty-two years old, native of New Brunswick, for the last eighteen years a resident of Placer County, Cal., married, had six children at full term, and two miscarriages, following great bodily exertion. The last child was born in 1872. In each case the puerperium was uncomplicated and of short duration. She reached the menopause at the age of forty-six. About six years ago she fell, accidentally striking, with her left side, against a log of wood, and from this fall she dates the beginning of her ailment. She first complained of pain in the region of the left kidney, which would come and go at intervals; then she

began to feel slight inconvenience in micturition. Two years ago she passed a little stone and a quantity of pus and blood; four or five months later there was another discharge of blood and pus, followed by a sensation of great relief to the patient. Afterward she became continually worse, and, being remote from competent medical attendance, did not receive adequate treatment. She finally came to the city April 19, 1888. Dr. Winterberg found her on that day completely exhausted and prostrated by the sufferings she had to endure during her long trip, and unable to leave the bed, since even the slightest motion would make her pains excruciating.

A continuous tremor was shaking her whole body, especially the lower extremities; the pulse was very small and rapid (125), and there was a striking pallor of the face. She complained of great pains in back and loins, and of very frequent micturition, the end of which was always accompanied with unendurable pain. A digital exploration of the vagina proved to be negative in consequence of the enormous thickening of the vesical walls, as was seen later. Being without a sound to explore the bladder, he had to postpone further examination until the following day, when he at once, after the introduction of the sound, discovered the presence of a large calculus. The patient being told that an operation would be necessary, consented without hesitation, and April 22 was fixed for that purpose.

Drs. Foulkes and Kreutzmann assisted, the presence of more assistants being dispensed with by the use of a leg-holder, which keeps the patient in the lithotomy position. One-third of a grain of morphine having been injected hypodermically, the patient was then anæsthetized, the A. C. E. mixture being used. The pulse was very feeble first, but soon rallied under the influence of the morphine. She was placed in the lithotomy position, and an incision was made over a grooved staff through the anterior wall of the vagina, commencing about at the neck of the bladder and extending exactly in the median line for about three inches, when, after the introduction of the finger, the stone could be felt in the fundus of the bladder behind the trigonum, imbedded to over half of its circumference in a diverticulum, and apparently firmly adherent. The adhesions were broken up with the finger, after which it was possible to grasp the stone and extract it with a pair of extracting-forceps.

The longest diameter of the stone was two inches, the longest and shortest circumference being four and one-half to five and one-half inches respectively, and the weight being 900 grains. The bladder was then washed out with a weak solution (1–8000) of bichloride of mercury, and the wound closed up with twelve catgut and six silk sutures; a soft Nélaton catheter was introduced through the urethra into the bladder, and fixed by strips of adhesive plaster for a permanent draining, and about a quart of a three per cent. solution of boric acid used twice a day for washing out the bladder; simultaneously a 1–5000 solution of bichloride of mercury was used for irrigating the vagina twice daily.

The patient was placed in bed with hot bottles to her feet, and she soon recovered consciousness. She declared that she felt greatly relieved, being free from pain for the first time in the last six months. The universal tremor gradually passed away, and she began to gain strength. When Dr. Winterberg saw her on Wednesday morning, the third day after the operation, he learned that the catheter had come out of the bladder the preceding night, after a severe attack of colic, whereby she soon got relief. He found the instrument clogged, and reintroduced it after cleaning it. On examination, he further ascertained that there was no urine passing through the vagina. The bladder would hold now easily four ounces of fluid without distressing the patient. The capacity increased, until two weeks later he could inject twelve ounces without incommoding her. On the eighteenth day of the operation, treatment was discontinued; there being no more symptoms of cystitis, the patient having left the bed at the end of the second week. On the 12th of May, twenty days after the operation, he saw her for the last time; a firm cicatrix had formed over the line of incision; the silk sutures had been removed two weeks before. She felt now strong enough to go to her daughter in Washington Territory.

Dr. Winterberg remarks that the principal point of interest connected with this case is the rarity of stone in women. Klien, in the Moscow City Hospital, found, in 1,792 cases of stone in the bladder, only four (4) in females; M. Lett did lithotomy 106 times in men and only once in a woman during a period of fifty-seven years; I. Winkel found, amongst 10,000 female patients examined by him during a period of twenty-four years (1860–84), only one affected with stone. As to the various methods of operating for stone in females,

colpocystotomy certainly will be the most eligible one in all those cases in which a bloody operation is necessitated by the size of the stone in adult females; while in children, epicystotomy would be the proper method in a number of cases, if the stone were too large for extraction through the pelvis without injuring the soft tissues. The vagino-vesical operation was performed the first time by Fabricius Hildanus (in 1628), and his example has been imitated repeatedly by different operators.

There is no risk, he says, of producing a vesico-vaginal fistula by this operation, if the wound be properly closed by careful coaptation and suturing. The material he would select for suturing in future cases would be catgut; that it will certainly resist absorption until union has taken place is shown by the present case; the edges of the wound had been agglutinated firmly enough on the third day to resist a pressure strong enough to force out the catheter, which had been attached quite securely to the neighboring parts by means of several strips of rubber plaster.

As to the use of the permanent catheter, he thinks it will be extremely beneficial in a case like this, where there was an immense thickening of the vesical walls. By its employment the organ is entirely set at rest, and consequently atrophy of the thickened tissues will take place; besides that, the urine, being drained off as soon as it enters the bladder, has no time to be decomposed or act as an irritant, and the presence of a soft Nélaton catheter will not cause any trouble whatever, provided it be cleaned at least once in two days.

Tumor of the Spinal Cord; Removal; Recovery.

At the meeting of the Royal Medico-Chirurgical Society, June 12, 1888, Dr. Gowers gave in detail the medical history of this case (which has already been referred to in the Reporter, February 18, 1888). The patient was a man, forty-two years old, who had suffered for three years with localized pain beneath the lower part of the left scapula. The pain varied much; at times it was scarcely felt, at other times it was most intense, and then was increased by movement to such a degree as to render it impossible for the patient to walk. Many medical men were consulted, and the diagnosis varied between aneurism and neuralgia. Hypochondriacal insanity was even suggested, on account of the irritability of the patient, whose mind almost gave way under the continued suffering. Four months before the operation, first the left and then the right leg became weak, and the loss of power gradually increased to complete paraplegia. The patient was first seen by Dr. Gowers, with Dr. Percy Kidd, on June 4, 1887. There was then motor and sensory paralysis up to the level of the sixth or seventh dorsal nerves, with intense spasm in the legs, foot clonus, and rectus clonus. The urine was retained, and there was some cystitis. At the level of the sixth dorsal nerves there was severe pain around the trunk, greater on the left side, and increased to agony by any movement. The symptoms pointed clearly to compression of the cord by a morbid process outside it. Caries of the spine could be practically excluded; aneurism was improbable, although not impossible. The diagnosis lay chiefly between a tumor of the spinal bones and a tumor of the membrane. The indications (described in the paper) made a meningeal tumor rather the more probable. Syphilitic disease could be excluded. An operation afforded the only chance of escape from certain death after intense suffering. Sir William Jenner saw the patient, and concurred in the diagnosis, and sanctioned an operation. The patient was aware of the uncertainty of the result, but was extremely anxious that something should be done.

The surgical history of the case was read by Mr. Horsley. The diagnosis of intradural tumor pressing on the cord appearing to be well founded, an operation was performed for its removal on June 9. Mr. Victor Horsley laid bare the spinal column from the third to the seventh dorsal vertebræ, and cut off the fourth, fifth, and sixth spinous processes with strong bone-forceps. He made his way through the laminæ on both sides, and the still more obstinate ligamenta subflava, slit the dura mater up the middle line, and laid bare the spinal cord. When the opening was first made the injury had been suspected, but the tissues were healthy. That the attempt should be abandoned was counseled by some, but Mr. Horsley preferred to complete his task, and removed the posterior part of another superior vertebra, and there found a tumor of the dura mater compressing the cord. It could easily be shelled out of its deep bed; the wound was carefully closed and drained, and it healed by first intention. The patient gradually lost the agonizing pain, and at the same time gradually recovered motor and sensory power, as well as control over the

bladder and rectum. He remains in perfect health. Appended to the surgical history of the case are a table and analysis, in which the chief clinical facts relating to fifty-seven other cases are recorded. From the latter it appears that operation is the only treatment to be adopted in such cases, and that, if it had been resorted to, 80 per cent. should have recovered, whereas all died.—*British Med. Journal*, June 16, 1888.

Hemiplegia Occurring Nine Days After Parturition.

At the meeting of the Obstetrical Society of London, May 2, 1888, Dr. E. F. Scougal reported a case in which a patient, 37 years old, was confined on August 21, 1887, of her seventh child. All went well till August 28, when she complained of numbness and tingling in the first, second, and third fingers of the left hand. At 1.30 A.M. on August 29, the nurse noticed that, amongst other symptoms, the patient's mouth was slightly drawn to the right. At 3.30 P.M. she was found as follows: Complete paralysis of the left arm and paresis of the left leg; slight divergent strabismus of the right eye, and the mouth slightly drawn to the right side. There had been a little difficulty in swallowing, which had now passed away. Consciousness and speech were unaffected; there was some pain on the right side of the head. The skin was moist, temperature normal, pulse 96; no loss of sensation could be detected. Three and a half grains of calomel in pill were given, to be followed by two ounces of Æsculap water every two hours till catharsis was produced, and a draught containing iodide of potassium and citrate of potash was prescribed. By 1 P.M. the left leg was completely paralyzed. In the course of the next day, drowsiness came on, the bowels were opened by enemata; later on, restlessness and increased pain in the right side of the head were observed, the temperature rose to 99.2°; the pulse was irregular in rhythm and power, varying from 72 to 84. The secretion of milk had quite disappeared by August 31. The patient became comatose, and died at 2.15 on September 1. The brain alone was examined after death. A clot was found in a vein on the surface of the brain, corresponding in position to the right middle meningeal artery, and another in a vein corresponding in position to the right middle cerebral artery. These clots were distinctly *ante-mortem*. There was no sign of thrombi in the sinuses. The brain, pons, and medulla exhibited no trace of extravasations, or of any other morbid appearance.

In discussing the case, Dr. Leith Napier remarked that puerperal hemiplegia was practically due to thrombosis, embolism, or reflex influences; the first cause being the most frequent.—*American Journal of Obstetrics*, July, 1888.

Sudden Death from Distention of the Stomach.

Dr. M. A. Veeder, of Lyons, N. Y., writes to the *Medical Record*, July 14, 1888, that he saw recently an example of sudden death from a cause that is probably quite uncommon. The patient, a woman in middle life, was subject to dyspeptic symptoms, at times suffering greatly with gastralgia; otherwise her health was good. On the day of her death, she was apparently as well as usual, and ate a very hearty dinner. Rising from the table, she went into the garden to feed some chickens. In less than three minutes, she was found by her husband, who followed her, sitting upon a step, dead. At the post-mortem examination, within twenty-four hours, it was found that the stomach was very large, and had been distended, not only by the hearty meal, but also with a considerable volume of gas. The heart was compressed so effectually by the distended stomach that its walls were in contact with each other, and it did not contain more than a few drops of blood. Careful examination, he says, failed to reveal any other cause of death than this stoppage of the circulation, which must have been instantaneous and complete.

Use of Cold in Summer Diarrhœas of Children.

With reference to the use of cold in the summer diarrhœas of children, the *Therapeutic Gazette*, July, 1888, remarks: "As the heated term is upon us, we take the liberty of calling the attention of our readers to a practice concerning which we have frequently written, but which we do not think obtains among the profession as largely as it ought to. Anyone who watches the mortality-lists of our large cities knows that any marked ascent of the average heat-record of the thermometer is accompanied by a corresponding rise in the mortality-list; also that the rise is chiefly made up of infantile deaths, such deaths in turn being in great part the result of some form of diarrhœa. Whether these cases are called cholera infantum, or summer diarrhœa, or

enteritis, or colitis, we believe that they are in great part the direct result of overheating of the body, and that they are to be best combated by the use of the cold bath. In all such cases, the physician should take the temperature of the little patient, and if, as is generally the case, the bodily heat is distinctly above normal, systematic cold bathing should be enforced. It may be necessary to give the cold bath every two hours; it may only be required three times in the twenty-four hours. At first, the child usually resists the bath violently, and the prejudices of the mother often are like the wall of a fortification; but, whenever we have persevered, the results have been so marked as not only rapidly to overcome the prejudice of the mother, but also to teach the child itself the value of the bath and cause the outcries and resistance on its part to cease entirely. We wish that this treatment would be fairly tried by our readers, and reports made thereon through our columns."

Terpine in Diseases of the Lungs.

Dr. D. M. Cammann, in a paper read before the Section on Materia Medica and Therapeutics of the New York Academy of Medicine (*Medical Record*, June 30, 1888), says that terpine is a crystalline hydrate of the oil of turpentine. Crystals similar, if not identical in character, have been found in the interior of an old pine-log, where they were probably formed from the oil deposited in the wood. If oil of turpentine be allowed to stand for some time freely exposed to the air and to moisture, crystals of terpine will be deposited on the sides of the vessel. It is colorless, odorless, and almost tasteless, insoluble in water, soluble in alcohol, and melts at 212° F. It was first prescribed as an expectorant by Lépine, of Lyons, who calls it "the best expectorant in existence." Its use in bronchial affections has been favorably mentioned by Vigier, Jeannel, Sée, and Boyland. New drugs are apt, he says, to be received with enthusiasm, to run a brief course, and then to drop out of use. Terpine has not escaped the usual fate at the outset of its career, but that it is a drug that deserves a permanent place seems probable. During the past year, Dr. Cammann has frequently used terpine in his class at the Demilt Dispensary and elsewhere, and a careful record of a number of cases has been kept by Dr. F. N. Patterson.

After giving short histories of a few of the cases, he says an analysis of twenty-five cases shows that nineteen were cases of bronchitis, most of them chronic, some of them of long standing, with extensive pleuritic adhesions. Four cases were of phthisis, one of pleurisy, and one of emphysema. The shortest time that any of these cases was under treatment was two days, the longest time nine weeks. The average length of treatment was seventeen days. From four to eight grains of the terpine were given in pills, usually four times daily. Most of the cases took four grains four times daily, without any other drug. Twenty-four of the cases were improved, most of them markedly, and two only slightly. One case was unimproved. This was a case of bronchitis that had lasted a month, and four grains of the terpine were given three times daily for five days. The expectoration became thinner, but no other change was apparent. The cough, he says, was lessened in all the cases except the one just mentioned. In twenty of the twenty-five cases the expectoration was markedly diminished; in four it was not diminished, and in one it was increased. In several cases it was increased for the first day or two, and afterward decreased. The cases in which the expectoration is recorded as not diminished, and the one in which it was increased, were under observation only five or six days, and it is probable that if they had been treated longer a diminution might have been recorded in all. In eighteen it was thinner, becoming more watery and less purulent; in six it was no thinner. Of the cases that were troubled with dyspnœa, the dyspnœa was diminished in sixteen; it was undiminished in three. The patients noticed an increase in the urine in eleven cases; in eleven cases no increase was noticed. In some of the cases the appetite improved; in one case slight nausea, and in another fulness of the head, were experienced after taking the pills.

The mode of action of turpentine and its derivations, he thinks, needs further investigation. That they are cardiac stimulants has been asserted, probably on insufficient evidence. The experiments of Nothnagel and Rossbach indicate that oil of turpentine in all cases diminishes the blood-pressure, and to a very slight degree, or not at all, the number of cardiac pulsations. Whether they enter into the circulation unchanged or not is uncertain. Whether the peroxide of hydrogen, which some of the terebinthinates, in common with many other substances, are capable of generating and then absorbing, plays an important part in their action, he thinks is a subject for further study.

Foreign Body in the Male Bladder.

G. Buckston Browne, in a letter to the *British Med. Journal*, June 30, 1888, says that a man was sent to him by Dr. Miller on May 19, 1887, with the following history: The patient said that, several years ago, he had been told by a medical man that, if there was ever any difficulty in micturition, a paraffine candle was to be warmed, molded into the form of a bougie, and passed into the urethra. Six weeks before seeing Mr. Browne, having some slight irritation, these manœuvres were practiced; but, on attempting to remove the paraffine bougie from the body, little more came away than was actually held between the fingers. Since then, he had become more and more uncomfortable; the movements of a cab or carriage could not be borne, and he could walk only very slowly. He felt as if "he had a marble in his bladder." The bladder had been sounded and nothing found, and he complained that several surgeons had been incredulous of his story. He was nervous, and in so much pain that Mr. Browne declined to do anything until he was in bed. Mr. Charles Moss administered ether, and Mr. H. S. Byam, of Chester Square, assisted. A wax-like body was at once found in the bladder, and seized with a lithotrite with some hesitation, because there was no means of knowing exactly what had to be dealt with, and Mr. Browne was anxious not to bite into a sticky mass from which the jaws of the instrument might not readily be extricated. However, during its six weeks' sojourn in the bladder, the wax had become incorporated with a good deal of phosphatic matter; it crumbled rather than broke, and very soon nothing of any size remained to be seized with the lithotrite. An ordinary lithotrity evacuating-tube was then introduced, but only a small amount of *débris* could be extracted, for it was so light that the bulk of it refused to be drawn into the aspirator. The lithotrite was therefore again introduced into an almost empty bladder; and a good deal of waxy matter, which burnt with a flame when applied to a lighted candle, was withdrawn between the blades of the instrument; the rest was well broken up, and the operation completed. The patient being a comparatively young man, it was thought that almost all might now be left to nature, and, for about two or three weeks, not a day passed without some paraffine coming away, either naturally or by the use of a soft catheter and an india-rubber washing-bottle. On June 19, 1887, he passed the last piece, and on the same day was the winner at putting the shot and throwing the hammer, at some athletic sports. He has continued perfectly well ever since.

Tuberculosis Transmitted by the Milk of a Phthisical Cow.

A remarkable case has been recorded by Denune, of Berne, in which an infant became infected with tuberculosis through the milk which had been obtained from a phthisical cow. The details of the case are as follow: An infant, four months old, belonging to a family whose history was absolutely negative in regard to tubercular affections, died of tuberculosis of the mesenteric glands, a fact which was confirmed at the post-mortem examination. The glands alone contained the characteristic bacilli; the latter were not even to be detected in the intestinal mucous membrane, and no bacilli were found in any other part of the body. The child was fed with the milk of a cow which was especially kept for the purpose. The cow, for the purposes of examination and inquiry, was slaughtered, and a careful post-mortem made of its carcass. The left lung and pleura of the animal were found to be studded with tubercle, and, in the tubercular nodules, bacilli were easily found. The milk was then submitted to a minute investigation, but bacteriological examination at first yielded negative results. Finally, however, tubercle bacilli were detected in portions of the liquid expressed from the deepest parts of the mammary gland. The case is an important one from several points of view, and claims attention by reason of its bearing upon the so-called hereditary transmission of tuberculosis. If, instead of a human infant, a calf had in a natural manner fed itself with milk from its mother's udders, we can hardly conceive otherwise than that the calf would have similarly become infected with tubercle. Assuming such to have occurred, the case would obviously have been regarded as one of the hereditary transmission of tubercle. But, taking the supposition that a woman suffering from phthisis suckles an infant, there seems to be no reason why the same result should not occur, and why, like the infant and the cow to which reference has been made, the mother should not transmit the bacilli, by means of her milk, to her offspring. All this appears to be possible enough, and has, perhaps, even occurred in some cases without the fact having been proved by demonstration.—*Medical Press and Circular*, June 27, 1888.

Action of the Vagus Upon the Secretion of Urine.

J. B. Masius (*Extrait des Bulletins de l'Académie royale de Belgique*, No. 3, 1888) confirms the facts ascertained by Arthraud and Butte that, after sufficiently strong electrical irritation of the peripheral end of the previously severed right vagus, the secretion of urine diminishes and becomes entirely retained, while the urine which is passed contains albumin, blood-corpuscles, and epithelial cells. Masius finds, in addition, that the left vagus behaves in like manner. This phenomenon is explained by the further observation that, while electrical irritation increases the pressure with which the blood flows out of the renal veins, after injection of atropine, which paralyzes the inhibitory fibres of the heart and vaso-constrictor fibres of the kidney which come from the vagus, neither secretion of urine nor discharge of blood from the renal veins is modified. The changes in secretion of urine are, therefore, brought about by constriction of the arteries of the kidney.—*Centralblatt f. d. med. Wissenschaften*, June 2, 1888.

Unusual Foreign Body in the Larynx.

A recent number of the *Revue de Médecine et de Pharmacie militaire* contains an account of an extraordinary case, in which a leech, that had somehow found its way into a man's larynx without his knowledge, gave rise to unpleasant symptoms, for which the medical attendants were puzzled to assign a cause. The patient, a soldier, had suffered for three weeks from hoarseness and a sensation as of a foreign body in the larynx, but there was no serious dyspnœa, and nothing could be seen with the laryngoscope. During the last eight days of that time, he spat blood, and at length he distinctly felt something move deep down in his throat. On the twenty-third day, after the patient had made a violent expiratory effort, Dr. Godet caught sight of the leech fixed in the subglottic part of the larynx. No proper laryngeal forceps being at hand, the thyroid cartilage was divided in the middle line in front; on separating the two halves, the leech was easily removed. Two sutures were inserted, and perfect union was obtained. The voice was absolutely unaffected by the operation, a point worth noting in view of the great stress that has recently been laid on the serious impairment of the vocal function which thyrotomy is supposed to entail. One would like to know how the unwelcome guest managed to get into the man's throat without his being aware of the fact. It is possible that he swallowed it in drinking water out of a ditch or pond.—*British Medical Journal*, July 7, 1888.

Antipyrine in Rheumatic Chorea.

It is a very difficult for a practitioner to form an opinion as to the value of a new remedy. In many cases, experience has proved that the eulogistic claims of introducers of such remedies have to be greatly discounted before a correct estimate can be formed. At present, antipyrine is the fashion. But even now it is difficult to correctly estimate its value as an antiseptic, analgesic, antipyretic, and antirheumatic. In an article published in *La France Médicale*, No. 14, 1888, Dr. B. Boussi confirms Legroux's statement as to the value of this drug in chorea, and calls further attention to this employment of antipyrine. Dr. Boussi states that he was called to see a child eight years of age, the son of a workman, whom he found in a state of high fever, complaining of pain in the throat and headache. The preceding day, he had had an eruption, which had, however, disappeared when seen by Dr. Boussi. The probable diagnosis of scarlatina was made, but a few days later the case developed into an acute articular rheumatism, accompanied with endocarditis. Thirty grains of salicylate of sodium were given daily, and cure resulted in eight or ten days. At this time, a pronounced desquamation confirmed the diagnosis of scarlatina. Five or six days later, after the cure of the rheumatism, the child commenced to suffer from disordered movements, which became more and more violent, until in ten days chorea of the gravest character was developed. Treatment was then commenced with thirty grains of antipyrine given in four doses daily in a little sugar and water. On the very next day, improvement was evident, sleep was possible without disturbance by choreic movements, and in two days, after the administration of sixty grains of antipyrine, the choreiform movements had almost entirely disappeared. In all, the treatment had lasted but eight days, during which time the chorea was practically cured, the patient having taken in all but little more than half an ounce of antipyrine. Dr. Boussi's results encourage an extended trial of antipyrine in chorea.—*Therapeutic Gazette*, July, 1888.

THE
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ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D., EDITOR.

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Write in ink.
Write on one side of paper only.
Write on paper large letter size.
Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate, or omit words like "the," and "a," or "an."
Make communications as short as possible.
NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

QUACK ADVERTISEMENTS IN RELIGIOUS NEWSPAPERS.

When a wrong is assailed in general terms, the assault is apt to be interesting to those who participate in it, and perhaps to those who witness it; but there is some danger that it may not accomplish very much. This truth is illustrated by the results which have so far followed the attempts of various medical journals in this country to abate the evil of quack advertisements in religious newspapers. These attempts have been approved and applauded by medical men, and those who made them knew they were discharging a useful office. But the religious newspapers have not been cured; and, indeed, they do not seem to have improved materially.

One of the reasons for this is, no doubt, the fact that the attack has not been sufficiently sharp on any portion of the line to break it, and that, while the whole religious press bore the brunt of the assault, no one part experienced any special inconvenience from it.

What is now needed, we believe, is that the force of public opinion should be concentrated upon conspicuous offenders, and that an attempt should be made to compel them to regard the principles of honor and decency which they have so long violated. This is a method which is far from pleasant, but it is our honest opinion that no kindlier one will effect the object.

That our readers may understand why we say this, we inform them that we took the trouble to send our Editorial of December 31, 1887—which we intended to be temperate, though plain-spoken—to the editor of almost every religious paper in the United States, and that by personal correspondence we have endeavored to enlist the self-respecting religious papers on the side of right in this matter. Some good has been accomplished. A few of the religious papers have expressed themselves as we hoped they would. More than this, a number of our medical contemporaries have added their efforts to ours, while the Medical Society of the State of Arkansas has issued a series of resolutions against the evil of false and misleading advertisements in religious newspapers, and these resolutions have been approved and endorsed by the American Medical Association.

We were glad to note, also, in the REPORTER, June 9, 1888, that a representative religious body—the General Assembly of the Presbyterian Church—at its last meeting, in Philadelphia, received, and, we believe, endorsed, an overture of a like character.

This much is cause for thankfulness. But much more remains to be done. How much, may be judged from the fact that, in spite of all we have said, one of the most influential Presbyterian papers in the land persistently continues to publish advertisements

which any man of common sense would know to be absolutely and unblushingly false. In a recent issue of this paper, there were no less than seven advertisements which deserve to be characterized in this way, including sure cures for deafness, cancer, fits, and consumption! And the difficulty of dealing with cases of this kind may be estimated when we state that the editor of the REPORTER has made a special attempt, by writing personally to the editor, who is also the owner, of the paper referred to, to induce him to correct the wrong he was committing.

Another illustration is furnished by one of the representative papers of the Methodist Church—a paper which is, we believe, directly governed by the ruling body of that church. The *St. Joseph Medical Herald*, in May, 1888, speaking on this subject, says that this paper "sells the columns which should be filled with religious matter to the vilest impostors and most indecent advertisements of which the country can boast." This is strong language; but it is fully warranted by the circumstances.

We appreciate the good work done by religious papers, and it is for this reason that we wish to see them freed from a reproach which interferes with their usefulness and injures the cause of religion. We have tried to bring this about in a way which should not give needless offense. But, as we believe that no reform is ever accomplished without somebody being hurt, we shall not hesitate, when next we take this subject up, to lay our hands on particular religious papers and say plainly to the editor of each: "Thou art the man!"

We do not now take this step, because we hope that some to whom this charge would apply to-day will clear themselves before the time arrives to make it.

We beg our medical contemporaries to join their efforts to ours to cure this evil as gently as may be possible, but with all the firmness that may be necessary; and we beg our religious contemporaries to make our cause their own, so that we may seem rather to offer counsel to those who wish to know what is right, than to formulate censure against those who choose to do what is wrong. Physicians and the clergy are usually sympathetic with, and helpful to, each other; and it would be a pity if the religious papers were to maintain an attitude which invites the distrust and—it must be said—the contempt of those who should be their best friends.

TREATMENT OF PNEUMONIA WITH TARTAR EMETIC.

On several occasions during the twelve months just past, we have laid before our readers articles on the treatment of pneumonia, which directed attention to the usefulness of methods which have gone out of fashion, so to speak. It is interesting, therefore, to note that in Germany, of late, the merits of tartar emetic have been discussed and warmly advocated. In the *Deutsche med. Wochenschrift* for 1887, No. 47, there was a paper by Mosler which accorded an important rôle to this agent; and in the number for May 31, 1888, a similar position is taken, founded largely upon the experience of BRÜCKNER, who says that, in his opinion, there is no better remedy in the treatment of pneumonia in young and vigorous individuals, and that it may be regarded as almost a specific. He began its use at the suggestion of an intelligent practitioner, who declared that he had never had such good results from the use of any other remedy or measures. Brückner began the use of tartar emetic with decided misgiving, but soon became convinced of its great value. He reports the case of a young man with acute croupous pneumonia, to whom he gave, at the outset, a tablespoonful of a solution of one part of tartar emetic in five hundred parts of water. The patient soon vomited, and a dose of the solution was then given every two hours. In twenty-four hours, the patient had vomited four times, but was decidedly better, and in

five days his temperature was nearly normal, and his pneumonia in a state which left no room for anxiety. In his present practice, Brückner uses a solution of from one to three parts in two thousand parts of water, giving a tablespoonful every hour until vomiting or catharsis occurs, after which the dose is given every two hours. He has usually observed vomiting after the first or second dose. This is followed by from four to eight watery stools, sweating, and freer expectoration.

The beneficial results of this method in the treatment of seventy or eighty patients have been so striking that Brückner is quite enthusiastic over them. He has not found these results in every case so treated, but in the great majority of his cases he has seen great improvement to occur.

These results certainly warrant careful study in this country, where tartar emetic is not unappreciated, but where its administration in pneumonia is by no means common. There was a time when almost all cases of frank pneumonia were treated with bleeding and tartar emetic. But the time has passed away, and it is worth while to emphasize the claims advanced by Brückner, and to direct attention again to this valuable remedy.

BABY FARMS.

Under the euphemistic title of "Private Nurseries in New York," attention has been called in the daily papers to the extent to which baby farming is carried out in that city. So much complaint has been made in regard to these establishments in New York, that the Society for the Prevention of Cruelty to Children has decided to investigate and watch them. A special department is to be established, with inspectors who shall frequently and carefully investigate all the so-called nurseries now licensed, and an attempt will be made to suppress any that are conducted in violation of law. It is good to see that influential society has decided to make an attempt to root out an institution which commits some of the most outrageous cruelties that are permitted in this day. Probably many medical men living in large cities have their attention from time to time directed to what are called "Baby Farms." Not unfrequently a medical man is summoned out of his ordinary line of practice to see some wretched child about to die, whose care-takers desire of him nothing except a certificate of death, which shall save them from the investigations of the coroner. It is probable, also, that, under these circumstances, medical men, although moved to pity for the sufferer about to die, seldom think that it may be a public duty to call the attention of the authorities to the establishment in which the occurrence is about to take place; and yet there can be no doubt that it is a public duty, and that the conscientious discharge of this duty by physicians, no matter how troublesome, disagreeable, or unkind it may seem, would do more to put an end to the errors and atrocities of baby farming than all the investigations which could be carried out by any organized society. In New York, where the society mentioned is undertaking the work, we trust that the physicians will give it their hearty co-operation; and in other cities, where the work has not yet been so undertaken, we believe that physicians might suggest, to any similar society, the propriety of taking hold of it.

ANOTHER MEDICAL AND SURGICAL REPORTER.

In our issue of July 28, we called attention to the appearance of a new medical journal which had taken the name of this one. Assuming that this was an error not inconsistent with honest intentions, we expressed the hope that it would soon be corrected. Since then, however, the second number of that publication has appeared, bearing the title: THE TOLEDO MEDICAL AND SURGICAL REPORTER—the first two words printed small, and the part of the title which copies ours printed in large letters. This step on the

part of the publishers, we think, justifies the belief that they hope to profit by assuming our name, and are not to be deterred from it by those principles which actuate honorable men. We trust that our contemporaries, for the sake of the guild, will treat this appropriation of our title as it should be treated, and support us in endeavoring to maintain our exclusive right to the title which the MEDICAL AND SURGICAL REPORTER has borne for more than thirty years.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

COMPARATIVE STUDIES OF MAMMALIAN BLOOD, WITH SPECIAL REFERENCE TO THE MICROSCOPICAL DIAGNOSIS OF BLOOD-STAINS IN CRIMINAL CASES. BY HENRY F. FORMAD, B.M., M.D., Lecturer on Experimental Pathology, etc., in the University of Pennsylvania, etc., with sixteen illustrations from photo-micrographs and drawings. 8vo, pp. 61. Philadelphia: A. L. Hummel, M.D., publisher, 1888.

Dr. Formad, in this interesting monograph, lays down a principle which is of the utmost importance in hæmatology and in medical jurisprudence, namely, that it is possible by measurement of blood-corpuscles to determine whether or not they are those of a human being. This principle he defends by an argument founded upon an unusually large experience in the study of histology and in the trial of persons charged with murder. It is well known that he has encountered opposition, and even censure, for acting upon the beliefs expressed in this book in certain trials, and many who have felt that it was prudent to suspend their judgment as to the merits of the case until they had more facts to guide them will welcome his explanation of the grounds for his belief, especially as it seems to be a complete vindication of his actions. There seems to be little room for doubt that he is right in claiming that it is possible, in a reasonable sense, for one expert in the study of blood-corpuscles to say that such as come under notice in murder-trials are, or are not, human. The objections to this view appear to us to be captious; and we do not find anything in it, as put by Dr. Formad, to warrant the severe criticisms to which he has been subjected.

The book before us is sure of attracting much attention, and we think it a very valuable addition to the literature of medical jurisprudence. It is pleasant to note in it that full justice is done to the work of the late Dr. Joseph G. Richardson, of this city, whose skilful and careful measurements of blood-corpuscles were among the most valuable contributions to science.

PRACTICAL ELECTRO-THERAPEUTICS. BY WILLIAM F. HUTCHINSON, M.D. 8vo, pp. 247. Philadelphia: Records, McMullin & Co., 1888.

This book has been written with the object of explaining the indications for and methods of employing electricity in medical and surgical practice in such a simple way that it shall not be beyond the comprehension or opportunities of the average practitioner. This object has been, we think, very well attained. The author describes only such electrical apparatus as can be used by every intelligent medical man, and omits from his work all of those abstruse and elaborate matters in regard to electricity which encumber most systematic treatises on medical electricity. This he does—not because he does not appreciate the scientific value of these matters—but because he appreciates equally that they are not essential to a successful employment of this agent in actual practice. His book is not one for the accomplished student of electricity; but it is one eminently suited to the needs of those who stumble at too much discussion of "ohms" and ampères, but wish to be told in the briefest and most intelligible terms how they may employ electricity in treating disease.

We think the author might have gone a little further in illustrating the book, without disadvantage; but are glad to be able to recommend his work as clear and comprehensible, and, in our opinion, calculated to be very useful.

PAMPHLET NOTICES.

[Any reader of the REPORTER who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

THE EXTRACTION OF CATARACT AS INFLUENCED BY MYCOLOGICAL DEVELOPMENT. BY A. E. PRINCE, M.D., Jacksonville, Ill. 4 pages.

FOOD LAWS. A PAPER READ BEFORE THE MEDICAL JURISPRUDENCE SOCIETY OF PHILADELPHIA, MARCH 13, 1888. BY HENRY LEFFMANN, M.D. Philadelphia: Published by the Society. 7 pages.

CLINICAL NOTES ON PRURITUS. BY L. DUNCAN BULKLEY, A.M., M.D., New York. From the *Journal of Cutaneous and Genito-Urinary Diseases*, December, 1887. 14 pages.

THE DRINK EVIL. THE PHYSICIAN'S RELATION TO THE LIQUOR QUESTION. A lecture before the Lincoln Medical Society, April 10, 1888. BY A. S VON MANSFELDE, M.D., Ashland, Neb. From the *Daily Nebraska State Journal*, April 15, 1888. 8 pages.

—Dr. Prince's short article is not a systematic study of the subject indicated in its title, but a description of the method he adopts in operating for cataract, with a brief introductory statement of the opinion that suppuration is due to the action of microbes.

—We can heartily commend Dr. Leffmann's pamphlet to the attention of our readers. It deals in a sensible and temperate way with one of the most important questions of medical jurisprudence, and public sanitation. It is agreeable to find that the author holds views, in regard to this matter, similar to those of the REPORTER, and we wish they might have the careful attention of all medical men and all legislators.

—Dr. Bulkley's pamphlet contains a clear statement of the condition which is designated as pruritus by the dermatologists, illustrated by brief accounts of a number of cases occurring in his practice. One of the most interesting parts of his paper is that in which he describes his study of the symptom of itch-

ing as occurring in his own person, and its reflex relation to certain causes of irritation.

—Dr. von Mansfelde, in his lecture, presents what may be called the "temperance" view of the alcohol question, as contrasted with the "total abstinence" view. He studies the nature and effects of alcoholic beverages in sickness and in health, and expresses the opinion that they may be used with propriety in both states, although their abuse is dangerous. He acknowledges that in the state of health there is no need for the use of alcohol, but sees some advantage in its bracing influence in conditions of mental or physical depression.

In sickness, he believes great benefit may be derived from the use of alcohol as a medicine, and charges with fanaticism those who would forbid it entirely. His views are supported by quotations from the writings of eminent practitioners and observers, and deserve the thoughtful attention of all who are open to reason in a matter which is naturally so full of appeals to prejudice.

CORRESPONDENCE.

Typhoid Fever and Chorea.

We recently received a letter from one of our subscribers asking for the opinions of Drs. William Pepper, H. C. Wood, and Wharton Sinkler in answer to the question: "Is Typhoid Fever, Complicated with Acute Chorea, Necessarily Fatal?" In response to a request sent to these men, the following answers have been received, which we take pleasure in publishing.

TO THE EDITOR.

Sir: In reply to the question whether or not typhoid fever, complicated with acute chorea, is necessarily fatal, I would observe that cases of this fever, exhibiting any nervous symptom carried to a very high degree, are of unfavorable prognosis. This applies to ataxic phenomena as much as to any others. Mere jactitation, highly marked subsultus, and the like, are often met with in cases which, though severe, terminate in recovery. But, when the ataxia reaches a point at which the term acute chorea would become applicable, it indicates extreme danger. Without saying that such cases are necessarily fatal—for such a sweeping assertion can be made with reference to no symptom whatever—it must be admitted that they usually end fatally, and that this symptom (so-called acute chorea) is of most serious significance. Yours truly,

WILLIAM PEPPER.

1811 Spruce Street,
July 31, 1888.

TO THE EDITOR.

Sir: In answer to your letter of July 23, I would reply to question—"Is Typhoid Fever, complicated with Acute Chorea, necessarily Fatal?"—no.

Yours truly, H. C. WOOD.

Jewell's Island, Maine,
July 30, 1888.

TO THE EDITOR.

Sir: There is no reason why typhoid fever, complicated with acute chorea, should necessarily be fatal. If the attack of typhoid fever be severe and the choreic movements be general and violent, then the patient's condition would, of course, be more grave, and the chances of recovery diminished. Dr. Hunt has reported a case of fracture in patient suffering from chronic chorea where death ensued from exhaustion, owing to the fact that the fracture could not be held in position by any splint or dressing.

Yours truly, WHARTON SINKLER.

1534 Pine Street, Philadelphia,
July 24, 1888.

Solvent for Salol.

TO THE EDITOR.

Sir: Will you please give me, through the REPORTER, a solvent for the new preparation, salol? What literature I have on the subject does not give the mode of administration.

Cold water does not dissolve it at all; alcohol leaves a crystalline precipitate; and hot water separates the two ingredients and leaves the carbolic acid free.

The information will oblige an appreciative reader of the REPORTER.

S. H. BARHAM, M.D.

Lone Oak, Texas,
August 1, 1888.

[Salol is easily soluble in alcohol with the application of heat, and is entirely soluble in ether and benzine. For internal use, however, it is best administered in compressed pill, capsule, or wafer.

Ewald gives the following formula for a mouth-wash:

Salol	gr. xv
Alcohol	f℥iii
Tincture of cochineal	♏ lxxv
Oil of rose	gtt. i
Oil of mint	gtt. ii

M. Sig. Add a teaspoonful to a glass of water, and use as a wash. EDITOR REPORTER.]

Ipecacuanha Spray in Throat Cough.

TO THE EDITOR.

Sir: Please explain fully the method and form of remedy employed in treatment of throat cough by ipecacuanha spray. I have a patient upon whom I wish to use it at once. Yours truly,

H. L. MANCHESTER.

Parrlet, Vt.,
August 7, 1888.

[Dr. William Murrell, of London, employs the wine of ipecacuanha in the form of a spray in bronchitis and winter cough. Either a hand-ball apparatus or a small steam atomizer may be used, but the spray must be warm, and the patient should be protected from exposure afterward. The vapor should actually enter the lungs, and not be stopped by the palate and root of the tongue. Dr. Murrell says the best results are obtained by using the spray for about ten minutes three or four times a day, for a week or more. The wine of ipecacuanha may be employed pure, or diluted with water, as the requirements of the case may seem to demand. EDITOR REPORTER.]

Notes and Comments.

Caffeine as a Cardiac Stimulant.

In a communication on the use of the double salt of caffeine (caffeine sodium salicylate) in diseases of the lung (*Berliner klin. Wochenschrift*, June 18, 25, 1888), Dr. Te Gempt states that the drug is indicated in the course of acute fibrinous pneumonia as soon as there is evidence of heart-failure, lowering of the arterial pressure, and an abnormal frequency or an irregularity of the pulse. The administration of the drug should be begun, if possible, before the appearance of symptoms of collapse; while, in a sudden occurrence of the latter, caffeine is all the more urgently needed and its use is often of service. In conditions of cardiac weakness, failure, and atrophy, and also in drunkards and old men, its use from the very beginning is advised. When rightly used and in the proper doses, it effects a diminution in the frequency of the pulse and respiration, an increase in the arterial pressure, a lowering of the temperature, and a favorable influence upon the general feeling of the patient. Stimulants are not to be withheld, but are to be used, when indicated, along with the caffeine. The action of caffeine is rapid, and can be made more rapid and certain in threatening cases by giving it hypodermically. Its use may be continued for a short time after the subsidence of the pyrexia. Caffeine is indicated in conditions of atelectasis or hypostasis of the lungs; and its use in emphysema and asthma is analogous to its use in diseases of the heart

Electrolysis in Stricture of the Urethra.

Dr. T. H. Burchard, in a communication to the *Medical Record*, June 16, 1888, gives his unqualified approval to the following propositions previously formulated by Dr. William T. Belfield:

"1. It is applicable to stricture in any point of the urethra.

"2. Any stricture or succession of strictures, however rigid and cartilaginous, however long and tortuous, however tight, even if impermeable, can be readily and safely perforated.

"3. As a rule, it causes no pain or bleeding, is followed by no chill or urethral fever, and is always devoid of danger.

"4. When properly performed, it can produce no false passage or other local lesions.

"5. The effects are more enduring than those of either cutting or stretching."

Hereditary Chorea of Adults.

A. Huber (*Virchow's Archiv, CVIII*, S. 267) adds, to the few cases of hereditary chorea hitherto known, a series of new observations. He has himself demonstrated the presence of the disease in two sisters, an accurate history of whom he communicates. It seems that the father and aunt of both his patients, and the grandfather and great-grandfather, as well as several other members of the family, have had chorea. Hereditary chorea, he says, presents many variations from the ordinary form, especially in that the chorea is slight, even absent, in voluntary movements. In all Huber's patients, the chorea occurred in the later years of life, and, in the most of them, more or less pronounced psychic disturbances were present. No member of the family that is described by Huber had suffered with chorea of childhood. In the case in which Huber gives the notes of the autopsy, the patient had exhibited during the later years of his life an epileptic insanity, but no longer any chorea. There was found in this case nothing except a pachymeningitis and leptomeningitis of the cervical region.—*Centralblatt f. d. med. Wissenschaften*, July 23, 1888.

Treatment of Rupture of the Bladder.

Dr. A. Blum concludes a communication on ruptures of the bladder and their treatment (*Archives générales de Médecine*, July, 1888) with the following summary: Where the surgeon meets with a rupture of the bladder, or what he supposes to be a rupture of the bladder, he should, without hesitation and as soon as possible, cut down upon the bladder in the linea alba, in order to determine with precision the seat of the lesion and its extent. If the seat of the injury is toward the base—that is to say, if the peritoneum is not involved—perineal cystotomy is indicated. When the rupture is intraperitoneal, the edges of the wound should be brought together with the Lembert suture; the toilet of the peritoneum should be made without drainage. When, by reason of its situation and extent, the wound cannot be brought together, it should be stitched to the abdominal opening, or drainage secured after the manner of Socin, by making an artificial perineal opening. The existence of peritonitis at the outset is not a contra-indication to suture of the bladder. The chances of success, however, are much greater according to the rapidity with which laparotomy has been done.

Treatment in Neurasthenia.

In a paper on neurasthenia, read before the Ontario Medical Association, June, 1888 (*Canadian Practitioner*, July, 1888), Dr. D. Clark, Medical Superintendent of the Asylum for the Insane, Toronto, makes some suggestions as to treatment, of which the following is a summary: Rest and cheerfulness for the anæmic. Outdoor exercise and work for the plethoric and sedative. Fresh air, substantial food, and absolute cleanliness for both classes, as a rule. No chloral, no opium, no alcohol; in short, no artificial stimulant, soporific, or narcotic of any kind. Three hours of natural sleep or rest have in them, he says, more recuperative power than nine hours of stupor or drugged quietude. Such short cuts to rest, he thinks, only murder natural sleep and strangle the heroic efforts of nature to come back to normal conditions. Even when these stilts are used, it must be after serious and thorough deliberation. Any employment which will have a tendency to divert the mind away from self-contemplation and so secure relief by the law of substitution.

He finds that the best remedies are the arsenites, cod-liver oil, phosphide of zinc, pyrophosphate of iron, nux vomica, bromides with caffeine, zinc oxide with ergot, and such like. These tonics and calmatives, he says, assist nature to seek again the old paths. He advises the younger members of the profession, if sedatives or narcotics or stimulants are administered, to mask them as much as possible; for he says he has been told by dozens of victims to the alcohol, chloral, or opium habit, that the first knowledge they had of the pleasurable potency of such drugs was received from the family physician. Dr. Clark's method has been to use some menstruum which will disguise the taste and smell of these drugs and to maintain a stubborn silence as to their presence in his prescriptions.

Society Practice in New Orleans.

The *New Orleans Med. and Surg. Journal*, June, 1888, says in an editorial: "The custom followed by so many physicians in this city, of taking 'society practice,' has grown to such an extent as to threaten destruction to all legitimate work by those few who value the dignity or well-being of the profession. Four-fifths of the people of this city are banded together into so-called 'Benevolent Associations,' whose objects are weekly indemnity while sick, free medical services, including drugs, and free burial in case of death. Every one of these societies annually chooses a physician, a druggist, and an undertaker, and always after fierce competition. Just before the annual election a committee goes around to some fifteen or twenty physicians and the same number of druggists and undertakers, and requests each of these functionaries *to put in a bid*. Then begins the scramble. One physician will offer 'to do the work,' which includes attention to the families of the members, for four dollars per member per annum; another will bid three, another two, and so on until, as actually happened a few weeks ago, the final and successful bidder sees a profit and honor in the job at 'forty cents (40c.) per member per annum, payable quarterly.'"

Summer Drink for School-Children.

Dr. Duchesne, at a recent meeting of the Society of Practical Medicine of Paris, proposed the following formula for a summer drink for school-children. It is a slight modification of a formula of his used last summer with success in French schools. The object of the quassine is to impart a slight bitterness, to quench the thirst better, and to prevent children from drinking more than is healthy for them:

Glycyrrhizin	gr. xvi
Powdered sugar	gr. xvi
Bicarbonate of sodium	gr. xii
Crystallized quassine	gr 1-200
Oil of anise	gtt. ⅔

M. For one powder.

This quantity is to be dissolved in one quart of water when wanted for use. The beverage costs here about half a cent a quart. It would not probably cost much more in America. The idea of giving a slightly bitter taste is not a bad one. Should there be any difficulty in procuring the quassine, either gentian or any of the native bitter principles might be substituted. — *Therapeutic Gazette*, July, 1888.

The Pennsylvania and Maryland Union Medical Association.

The Pennsylvania and Maryland Medical Union Association will this year hold its annual meeting at Birmingham Park on the Brandywine Creek, in Chester County, August 30. It consists of members of the profession, from York, Lancaster, Chester, and adjoining counties, who bring to the meetings their families and friends; the occasion being always one of social enjoyment.

Experimental Feeding of Dogs.

The *Sei-I-Kwai Medical Journal*, of Tokyo, Japan, June, 1888, contains a report on the second experimental feeding of dogs in the Medical School of the Imperial Navy. The object of this experimental feeding of dogs is principally to decide the comparative value of the food given with regard to the power of preserving the health of the dogs, and not to ascertain the relative difficulty or ease of digestion. The experiment lasted fifteen months, and the number of dogs experimented on was six. The general conclusion drawn from the experiment is that barley is superior to rice as an article of food: the dogs fed on rice increased in weight at the beginning, while those fed on barley decreased; but eventually the opposite proved to be the case.

Treatment of Lead Deposits on the Cornea.

In the *St. Louis Med. and Surg. Journal*, July, 1888, Dr. A. D. Williams says that formerly lead deposits on the surface of the cornea were very frequently met with because sugar-of-lead solutions were for many years nearly the only remedy that physicians applied to sore eyes. The result was that, whenever an ulcer of the cornea developed, a deposit of lead took place. Latterly most physicians have learned that solutions of lead are dangerous, and they now rarely use them Sugar of lead is a good and efficient astringent and perfectly harmless so long as there is no break in the epithelium of the cornea. When lead is once deposited on the cornea, it becomes a source of continual irritation, so that an ulcer covered over with lead precipitate can never heal perfectly. On the contrary, the ulcer remains always irritable and often intensely painful, more especially at night. Dr. Williams says that he recently saw a colored man who had a large corneal ulcer plastered over with lead deposit. He had not been able to sleep comfortably for many years. The eye was not much reddened, but intensely irritable. It will be understood that in such cases the lead deposit is the indirect cause of the suffering. It prevents the re-formation of the epithelium, and consequently the nerves are constantly exposed to the atmosphere, and the injury is painful for the same reason that a fresh burn is painful.

The treatment, Dr. Williams says, is simple and easy. The lead deposit must be scraped off completely so that the ulcer can heal and exclude the air from the nerve-terminals. The scraping must be thorough, so as to remove every particle of lead. Formerly chloroform had to be given in these cases. Now cocaine is all-sufficient to prevent pain. The scraping is done with an ordinary knife, holding the edge vertical to the cornea and scraping back and forth till the white lead deposits are all removed. A solution of atropine should be used for a few days till the ulcer has healed over. The result is very gratifying to the patient, because it gives prompt relief from his suffering.

Colotomy.

In a paper on colotomy read before the Missouri State Medical Association, April, 1888, Dr. N. B. Carson gives his preference for Littre's operation (opening the bowel in the groin) for the following reasons (*St. Louis Courier of Medicine*, July, 1888):

"1. It is, when carefully done, not more dangerous than the lumbar operation.

"2. We are enabled to determine the exact seat of the disease, and, as a result, fix the intestine at any desired distance from the seat of the disease.

"3. The patient is by far more comfortable, from the fact that he is enabled to attend to himself without the aid of others.

"4. We are better able, with the opening in the groin, to fit a pad or truss which controls more perfectly the discharges, and with less discomfort, than when the lumbar opening is selected.

"5. That, in this operation, we are enabled to make a knuckle in the bowel, to prevent a passage downward of the feces, without adopting Madelung's method of dividing the bowel across and closing and dropping the lower end.

"6. When desirable, the artificial anus may be more readily closed in the inguinal than in the lumbar region."

Liquid Glue.

The *Chemist and Druggist* quotes the following formula for a glue, which is specially serviceable for wood and iron, from *Rundschau*, and says it possesses great resisting power:

Gelatine	parts,	100
Glue	"	100
Alcohol	"	25
Alum	"	2
Acetic acid (20 per cent.) . . .	"	200 (or q. s.)

Heat the whole together for six hours.

Naphthaline in Dysentery.

Hinterhof (*Russkaya Meditzina*) praises the good effects of naphthaline in dysentery. His formula is:

Pure naphthaline . . . . . gr. xv
Distilled water . . . . . f℥ii
To be used in two enemas.

Besides the naphthaline, he administers quinine. Tenesmus and smarting at the anus subside at the first enema, and recovery is established after the second.—*Bulletin Médical*, July 8, 1888.

Foreign Bodies in the Male Urethra.

Dr. B. C. Atterbury, in a communication in the *China Med. Missionary Journal*, March, 1888, says: "It seems that among some of the Taoist sects there are those who, for the purpose of warding off disease and fortifying the system, pay great attention to medical gymnastics, or what is known in China as *kung fa*. One of their practices is to introduce into the urethra bougies with the idea of keeping open the 'path of life,' preventing stricture, and curing spermatorrhœa. Dr. Dudgeon, in his hospital report for 1873, gives an interesting account of one of these cases. His patient was a Manchu, about 30 years old, who had joined one of these sects. For ten years he had inserted every night into his urethra a lean bougie, removing it in the morning. These bougies are of various sizes. When about to be introduced, they are rubbed with mercury, and are carried by their own weight toward the perineal region, where they can be felt. In the morning their extraction is effected by turning the body to one side and using a little pressure. Seven days before the operation he had made a sudden jerk on rising in the morning, and the little bougie reversed its usual practice and dropped into the bladder, where it was found. It weighed 256 grains and measured two and a half English inches. Dr. Bushell also tells me of an analogous case, in which he removed from the membranous portion of the patient's urethra a piece of pewter two inches long and shaped like a bougie. At the time, he was told that the man was a member of a Taoist sect." Dr. Atterbury then states that he has recently seen two similar cases, which were operated upon within a week of each other—one at the An Ting Mên hospital, and the second at that of the London Mission. The bougies in both these cases were pieces of bone chop-sticks, about 2½ inches long, and carefully rounded at both ends. Dr. Atterbury's patient would say but little as to how the piece of bone got into his bladder, but, from his account, the nine months during which he affirms it was there must have been a time of great suffering. It was easily removed by the median operation. An incrustation of the phosphates had formed around the article, which weighed altogether 465 grains.

But little information can be gotten from the Chinese beyond what is here given on this subject, since little is known about it outside of the members of the sect, and they are said to be sworn to secrecy. These cases, however, show that the practice of inserting these bougies cannot be a very uncommon one, at least in Peking. In some cases, it is said to be a punishment inflicted by the injured husband upon a man taken in adultery.

Etiology of Biliary Lithiasis.

In a communication in the *Wiener med. Wochenschrift*, No. 23, 1888, Dr. Zerner reports the following case as an example of the influence which compression of the liver can exert upon the formation of biliary calculi: An officer died in the hospital after a right-sided pleural effusion had been diagnosticated. At the autopsy, a hemorrhagic pleural effusion was found, and besides that a focus of encysted pus situated between the diaphragm and the convexity of the liver. The right lobe of the liver was compressed and depressed by this abscess, and contained a large number of biliary calculi. The author is of opinion that there must be more than an obstacle to the flow of the bile in order that calculi should be formed—that there must be also a pathological alteration of the wall of the excretory vessels, which obstructs the resorption of the solid elements in a greater measure than the resorption of the watery parts. He does not accept, therefore, the theory of Marchand, that biliary lithiasis is due to pressure by the corset. He thinks the chief cause of biliary lithiasis is to be found in a sedentary habit. This entails, as a consequence, an increase of intra-abdominal pressure, which in turn restricts the movements of the diaphragm, and then the flow of bile into the intestine; moreover, the sedentary habit predisposes to gastro-intestinal affections. Finally, Beneke has proved that seventy per cent. of persons with biliary lithiasis have arterio-sclerosis. It is very probable, he says, that the walls of the bile-ducts participate in the alteration of the walls of the blood-vessels.—*Gazette Médicale de Paris*, June 30, 1888.

Multiple Paralysis of Cerebral Nerves.

H. Unverricht (*Fortschritte der Medicin*, No. 24, 1887) communicates the history of a man thirty-eight years old, who had had a sore when twenty years old, but in other respects had had no decided symptoms of syphilis. This man noticed suddenly, while at work, that he could not hold his pipe in his mouth, and immediately showed bilateral facial palsy. The latter was followed by a unilateral paralysis of the soft palate, paralysis of the right oculomotor, of both abducentes, and by disturbances in the parts supplied by sensory fibres of the trigeminal of both sides, accompanied with neuroparalytic inflammation of the right cornea. After his admission to the hospital, he developed, within fourteen days, a paralysis of nearly all the cerebral nerves, only the left optic and the left trochlear nerves being demonstrably unaffected. Toward the end of his life, paralysis of the muscles of the extremities, as well as of the trunk and neck, occurred. The sensibility in the upper extremities was blunted. After eight weeks' illness, the patient died of gangrene of the lung, as the result of food passing into the windpipe. At the autopsy, there was first found a round-celled sarcoma in the mediastinum, of the size of an apple; metastatic growths from this were then found between the dura and base of the skull, which more or less blocked the openings in the latter and compressed the individual nerves.—*Centralblatt f. d. med. Wissenschaften*, June 23, 1888.

"Officinal" or "Magistral."

The Paris correspondent of the *Therapeutic Gazette*, July, 1888, says: A question of French has been decided by the Academy of Medicine of Paris. A short time since, the French premier requested the Academy to define exactly the pharmaceutical terms "*officinal* and *magistral*," the distinction being of some importance, for administrative reasons unnecessary to mention. The Academy appointed on the question a committee composed of MM. Planchon, Lefort, Bourgoin, Dujardin-Beaumetz, and Prunier, all shining pharmaceutical lights, and last Tuesday the committee presented a unanimous report, which will, of course, be adopted by the Academy, and, consequently, by the administration. As the definition settles a question hitherto very puzzling to foreign readers of French therapeutical and pharmaceutical literature, it is interesting to here relate it. According to the academical committee, "*officinal* medicaments are those whose formulas and mode of preparation are given by the Codex, and which, besides, will keep a long time without noticeable alteration. The *magistral* are such medicines as the pharmacist prepares when prescribed, and dispenses immediately, without regard to their keeping-properties." Such, it may be remarked, is the usually accepted meaning of the terms in general. But, to be more precise, the committee added: "1. Such medicaments only should be considered *officinal* which keep easily, and whose formula and mode of preparation are mentioned in the Codex, if they are galenical, or whose characters and method of purification and testing are given, if chemical. 2. It does not follow, nevertheless, that all medicaments mentioned in the Codex are necessarily officinal. Potions, tisanes, juleps, etc., are by nature essentially magistral, like all mixtures prescribed by the physician, even when exclusively composed of officinal medicaments. The fact alone of the mixing causes them to become magistral remedies." It is scarcely necessary to point out the different meaning of the word *officinal* in the two languages. In English it is applied to pharmacopœial drugs and medicines. In French it is derived from the word "*officine*," drug-store, and just means store medicines—that is, kept in stock.

Southern Surgical and Gynecological Association.

At the next meeting of this Association, to be held at Birmingham, Alabama, September 11, 12, 13, 1888, the following papers will be read: The President's Annual Address, W. D. Haggard, M.D., Nashville, Tenn.; the Annual Oration, W. F. Hyer, M.D., Holly Springs, Miss.; Floating Kidney, with Vicarious Menstruation, DeSaussure Ford, M.D., Augusta, Ga.; Gastrostomy, W. B. Rogers, M.D., Memphis, Tenn.; The Medical Treatment of Fibroid Tumors of the Uterus, Bedford Brown, M.D., Alexandria, Va.; Indications for Operative Interference in Cerebral Troubles, T. O. Summers, M.D., Jacksonville, Fla.; A Case of Tubal Pregnancy, Presenting Interesting Medico-Legal Relations, E. P. Sale, M.D., Aberdeen, Miss.; Superinvolution of the Uterus following Trachelorrhaphy, Virgil O. Hardon, M.D., Atlanta, Ga.; I, Dermoid Cysts of the Coccygeal Region, and II, Electrolysis in Gynecology and Surgery, E. J. Beall, M.D., Fort Worth, Texas; Alexander's Operation,

W. L. Nichol, M.D., Nashville, Tenn.; Hysterectomy in Cancer of the Uterus, W. H. Wathen, M.D., Louisville, Ky.; The Extravagancies and Impracticable Requirements of Modern Antiseptic Surgery, so far as the Country Practitioner is Concerned, J. M. Taylor, M.D., Corinth, Miss.; Treatment of Fractures with Plaster-of-Paris Splints, W. F. Westmoreland, Jr., M.D., Atlanta, Ga.; The Present Status of Electro-Therapeutics in Gynecology, J. R. Buist, M.D., Nashville, Tenn.; Antiseptics in Surgery and Gynecology, F. T. Meriwether, M.D., Asheville, N. C.; The Attitude of Removal of the Uterine Appendages for the Cure of the Convulsive Neuroses, W. Locke Chew, M.D., Birmingham, Ala.; Interesting Cases of Surgery, R. M. Cunningham, M.D., Pratt Mines, Ala.; My Antiseptic Bags, or Practical Aseptic Surgery, J.W. Long, M.D., Randleman, N. C.; The New Departure in Uterine Therapeutics—The Dry Method, T. A. Means, M.D., Montgomery, Ala.; A Study of the Various Methods of Treatment of Laceration of the Perineum, and Rectocele, with Report of Cases, J. H. Blanks, M.D., Meridian, Miss.; Report of a Case of Spinal Concussion, Jno. R. Page, M.D., Birmingham, Ala.; Fractures of the Forearm, Jno. Brownrigg, M.D., Columbus, Miss.; Some Practical Thoughts in Surgery, James Guild, M.D., Tuscaloosa, Ala.; Perineal Lacerations, M. C. Baldridge, M.D., Huntsville, Ala.; Electrolysis in the Treatment of Urethral Strictures, S. M. Hogan, M.D., Union Springs, Ala.; The Field and Limitation of Laparotomy, I. S. Stone, M.D., Lincoln, Va.; Operative Procedures in Hypertrophy of the Prostate, R. D. Webb, M.D., Birmingham, Ala.

The Association will convene in the hall of the Y. M. C. A., at 10 o'clock A.M each day. The Annual Oration will be delivered at O'Brien's Opera-House on the evening of the first day's session, at which time the Mendelssohn Club of Birmingham will give a concert for the entertainment of the Association. Entertainments have been arranged by the local committee to take up all the hours not occupied by the sessions. Hotels and railroads will give reduced rates; but only those holding certificates, signed by the ticket-agent at the point where through ticket to the place of meeting was purchased, will be entitled to the two-thirds reduction in return fare.

W. D. Haggard, M.D.,
President.

Wm. E. B. Davis, M.D.,
Secretary.

NEWS.

—Dr. Raphael, of New York City, died at Saratoga, August 4, after a short illness.

—Dr. R. L. Boyle, of Raymond, Miss., died July 13, 1888, after an illness of three weeks.

—Twelve new cases of yellow fever and two deaths were reported at Jacksonville, Florida, August 11.

—Two cases of trichinosis have been recently reported to the New York Board of Health, by Dr. Seibert.

—Dr. J. P. Campbell, a special student at Johns Hopkins University, has been appointed Professor of Biology in the Georgia State University.

—The Texas Medical College and Hospital, at Galveston, which was discontinued in 1887, has been revived. Lectures will be given, beginning October 15, 1888.

—Dr. Sahli has been appointed Professor and Director of the Medical Clinic at the University of Berne, succeeding Professor Lichtheim, who has gone to Königsberg.

—The *Atlanta Med. and Surg. Journal*, August, 1888, states that a movement has been started in that city looking to the establishment of a hospital for the indigent sick.

—The *New Orleans Med. and Surg. Journal*, August, 1888, states that diphtheria is again on the increase in that city. During last June, there were 50 cases and 22 deaths.

—Professor Hertwig will give instruction in embryology, hereafter, at the University of Berlin, and Professor Waldeyer will confine himself to general and microscopical anatomy.

—Professors Fritsch, of Breslau, and Kaltenbach, of Halle, having both declined the Chair of Obstetrics at Würzburg (Scanzoni's chair), it has been offered to Hofmeier, of Göttingen.

—Dr. Frank A. Tompkins, of Sandy Point, Texas, was recently shot in the back by a man named Day, with whom he had had some dispute. There is believed to be a chance of his recovery.

—The small-pox hospital at Aubervilliers, France, has been charged by M. Créquy with having been the cause of an outbreak of small-pox among its attendants. He recommended that such hospitals should be removed at least 500 or 1000 yards from any dwelling, and that all attendants should be revaccinated.

—The brig "Teneriffe," which was detained in quarantine at the Delaware Breakwater, was discharged August 7. The captain and seaman who had yellow fever have recovered and have returned to the vessel.

—The latest reports from Florida indicate that yellow fever is spreading from Plant City and Manatee to other places. Cases are now reported from Sandford and Jacksonville. There is some fear expressed lest an epidemic may occur in the latter city.

—The *Lancet*, July 28, 1888, says that a kind of epidemic of hysteria has developed at Pavia. About twenty women and girls were found in a small room, lying on straw, and affected from time to time with hysterical convulsions, followed by excitement, laughing, gnashing of the teeth, and other hysterical symptoms.

—Chattanooga, Tenn., has established quarantine against Jacksonville and all yellow fever infected points. A carload of Jacksonville refugees who were *en route* to Chattanooga were met at the depot on Saturday by the Mayor and Board of Health, and not permitted to remain over. They are said to have gone North.

—Surgeon-General Hamilton and officials of Savannah and Charleston, at a conference at Way Cross, Ga., August 12, decided that it is necessary speedily to deplete the city of Jacksonville, and to that end a camp of refuge, in charge of Dr. Guitéras, will be located at Boulogne, on the Savannah, Florida and Western Railroad. The Government will send tents there at once. The sick will not be allowed there, but will be sent back to Jacksonville for treatment.

—Dr. H. F. Formad, in a very interesting article in the *Journal of Comparative Medicine and Surgery*, July, 1888, takes the ground that "it can be regarded as established that the microscopist has ample and sure means to diagnose fresh or well-preserved human blood from that of certain animals, provided he has the proper experience and employs rightful and honest means." He relies largely, as intimated, upon the microscope for this differentiation, using a 1-18 Zeiss homogeneous immersion lens, which magnifies about 2250 diameters. Microphotographs made from this amplification, magnified to the uniform scale of 10,000 diameters, show recognizable differences in size between the blood corpuscles of man and those of the domestic animals, dog, ox, sheep, and goat, whose corpuscles nearest approach in size those of man.

HUMOR.

Repeated visits of Sir William Jenner to Windsor Castle, recently, gave rise to the story that the Queen was suffering from insomnia, but this is emphatically denied. The Doctor was merely making the sort of visits he Jennerally pays when the Queen is at the Castle.

Gentleman: "What's the matter, Uncle Rastus? You look sick." Uncle Rastus: "Yes, sah; I ate er whole watermelyun larst night, jess 'fore I went ter bed, an' I ain't feelin' bery well dis mawnin." Gentleman: "Are you going to see a doctor?" Uncle Rastus: "No, sah; I'se gwine fo' anudder melyun."—*New York Sun.*

Mr. Crowley, the Central Park chimpanzee, is sick, the result of a watermelon gorge he indulged in a few days ago, and the New York papers are describing the treatment his family physician is giving, together with bulletins about his (Crowley's) condition. Monkeying with a watermelon may not be good for Mr. Crowley's comfort, but it has wrought his importance up to an altitudinous point.—*Phila. Ledger.*

A Weather Expert. — Passenger (to stranger): "So you think we are to have a hot summer, sir." Stranger (pounding the seat): "Think? I don't think anything about it—I *know* so! The whole country, sir, will sizzle until snow flies!" Passenger: "You seem to be positive." Stranger: "Positive? Why, I am as sure of it as I am that I run the finest hotel in the Dogskill Mountains! Put that card in your pocket; it may save your life."—*Life.*

The *Boston Med. and Surg. Journal*, July 19, 1888, says that "the alarming complications which may attend even the mitigated form of the duello which prevails in France is illustrated by the following paragraph, which was thought worthy of being telegraphed under the Atlantic to a morning paper: 'There seems no reasonable doubt of Boulanger's recovery within a fortnight or so, although his wound appears to threaten him with all sorts of unpleasant complications, such as lockjaw or the less familiar complaint of embolic, caused by clots of blood in the bronchial tubes, or, what is still rarer, suffocation by hæmaturia in the respiratory channels.'"

MARRIAGE.

Comstock—Cullinan.—July 18, 1888, Dr. A. J. Comstock, Jr. (Jeff. Med. Col., 1884), to Miss Elizabeth W. Cullinan, both of San Buenaventura, California.

THE

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Clinical Lecture.

ON ISOLATION IN THE TREATMENT OF HYSTERIA.[1]

(A Lecture delivered in the Salpêtrière Hospital.)

BY PROFESSOR J. M. CHARCOT,
PARIS, FRANCE.

Gentlemen: Before returning to the principal subject of our present studies, I thought it would be of use to tell you something about those three children belonging to one family, whom I brought before you on the 19th of last December. I have no intention of repeating the history of this little epidemic of hysteria, developed under the influence of the practices of spiritualism: all the details I have given you in my previous lecture. I shall call to your mind only certain particulars needful to refresh your memory as to the condition of these children at the time they were presented to the clinic, in order that you may be enabled to-day the better to judge of the modifications which have been effected in them under the influence of the measures we have adopted and of the treatment which we have instituted.

The family, I may remind you, consists of three children—two boys and a girl. It is with the latter, aged 13½ years, that the affection began August 28, 1884, as the sequel of a séance of spiritualism which was prolonged from 9 o'clock in the morning till 7 P.M., and in which Julie played the rôle of medium. At the end of the séance, she was taken with convulsive paroxysms, which were repeated from fifteen to twenty times a day, till the admission of the whole family to the Salpêtrière, December 9, 1884. You remember that the two brothers had followed the deplorable example set by their sister, and November 15 the younger of the two, François, aged 11 years, about six weeks after the famous séance of spiritualism (which, by the way, had made no impression on him), was taken with a fit of hysterical delirium while still confined to his bed by an attack of rheumatism. Two days later, November 17, Jacques, the older of the boys, in his turn, had fits of delirium with hallucinations.

From this time forth, the three children could never come together in the house without having fits. The girl would begin, her brothers would follow her example, and this would happen several times a day; this unfortunate state of things, of course, could not be allowed to continue. Then it was that the parents besought us to interfere, and that we proposed to take their children into our service, to which they consented.

I. The proposition which I made to the parents, itself, contained a series of therapeutic considerations which I must now set forth. Admission to the hospital enabled me to effect:

The removal of the patients from the place where their disease first declared itself;

The absence of the father and mother, who had themselves become very nervous, and whose presence would, necessarily, according to my long and invariable experience on this point, prevent any effective treatment;

The respective separation of the three children.

The girl, in fact, was placed in one of the female wards of our clinical department. The two boys were put in the only male

[1] Continued from Reporter, page 68.

ward which we possessed at that time. The respective isolation of the three patients was not, then, altogether complete; we had, however, done the best we could to keep them apart. Such, in my mind, should be the fundamental conditions of treatment: the parents consented no longer to see the children but with my permission, and I seemed, myself, warranted in assuring them that, in all probability, in a few months we should be able to send home their children completely restored to health.

Such was the moral or psychical side of the treatment proposed; we reckoned, of course, on carrying out at the same time the medical treatment, properly so-called. The children confided to our care were, all three, pale and anæmic, and needed reconstituents, among which bitters and ferruginous tonics hold the first place. There was an indication, also, to endeavor to modify the rheumatic diathesis, which was so well marked, at least in one of them.

As for those agents which are addressed particularly to the hysterical state, we counted much on putting in practice the treatment by static electrization which renders us every day, in these cases, so great service, and this especially in default of a methodical hydrotherapic treatment, our hydrotherapic establishment of the Salpêtrière not being yet in good working order. We did not found any expectation on the employment of the bromides, experience having long taught us that this class of medicaments, which almost always acts well (at least to a certain extent) in epilepsy, remains completely inefficacious, not only in ordinary hysteria, but also in that form of hysteria which seems most to resemble epilepsy, namely, hysteria with epileptic form, or hystero-epilepsy. I say nothing of opium in large doses, or of other anti-spasmodics, the employment of which I do not condemn altogether, but which seem to me totally to have failed in such cases.

II. But I must confess, gentlemen, that if I had a mind to put in practice all the therapeutic agents, so-called, I should rely mostly on isolation, that is to say, on moral treatment, although, in the particular instance of these children, it was necessarily incomplete. In fact, it was possible for all three of the children to meet in this hospital even—a thing which has often happened; moreover, the two brothers occupied the same ward, and, like their sister, could have before their eyes, and on different occasions, in the common sleeping-rooms, various manifestations of convulsive hysteria. But we could not help this, and, in my judgment, it was better for them to live in these conditions than to remain under the paternal roof, in perpetual contact with the father and mother, and in close relations with them all the time.

I cannot too much insist upon the capital importance which I attach to isolation in the treatment of hysteria, where, indisputably, the psychical element in the majority of cases plays a considerable, if not a predominant, part. It is now nearly fifteen years that I have firmly held to the necessity of isolation in this disease, and all that I have seen during this time only tends to confirm me more and more in my opinion. Yes, it is necessary to separate growing and adult children from their father and mother whose influence, as experience shows, is especially pernicious. Experience, I repeat, proves this absolutely, although it may not always be easy to assign a reason for this, especially to mothers, who are apt to give a deaf ear to such considerations, and generally yield only at the last extremity.

In city practice, isolation, such as I have urged, is, in fact, of everyday occurrence in cases of this kind, and the conditions for such isolation in a city like ours are ample and excellent. In Paris, for the last fifteen years, hydrotherapic health-institutes (*maisons de santé*) treat such patients with complete success, possessing admirable arrangements for this end. In the provinces, isolation is more difficult to effect, for establishments suitably furnished and managed are generally wanting: it is quite possible to organize private health-resorts on a small scale, but you readily understand that they would necessarily be poorly equipped for doing thorough and systematic work.

In the hydrotherapic *maisons de santé*, the patients are placed under the direction of competent and experienced nurses who are generally Sisters of Charity, who have become, by long practice, very expert in the management of this kind of patients. A kind but firm control, much calmness and patience, are here indispensable conditions. The parents are systematically kept away till the day when, by reason of a notable improvement in the condition of their children, the latter are permitted, *as a recompense*, to see them; first, at long intervals, then oftener, as recovery becomes more pronounced. Time and hydrotherapy, to say nothing of the internal treatment, accomplish the rest. For my part, I have the firm conviction that incipient hysteria,

especially in young subjects and particularly in males, may often be nipped in the bud, if it is possible to persuade the parents to take energetic measures from the very start, and not to wait till the disease takes root and develops in consequence of having been too long left to itself.

III. In order to make plain this remarkable influence of isolation in the treatment of hysteria in young subjects (in this category marriageable girls being included), I might cite numerous instances in which it has proved to be singularly efficacious. But, not being able to enter into long details, I will give you the particulars of one case which seems to me to be a typical one, and very appropriate to my purpose.

My narration concerns a young girl of Angoulême, thirteen or fourteen years of age, who, for five or six months, had grown very rapidly, and who, all at once, utterly refused all nourishment, although there was no trouble with deglutition, or any disorder on the part of the stomach. It was one of those cases that border on hysteria, but which do not always properly belong to it, but which have been described by Lasègue in France, and by Sir William Gull in England, under the name of *nervous anorexia*, or *hysterical anorexia*. The patients do not eat, they are not willing or able to take food, although there is no mechanical obstacle to the passage of the food or to its sojourn in the stomach when once ingested. Sometimes they eat on the sly, but not always, as has been supposed; and, although the parents themselves favor this deceit by placing articles of food in places where they may easily find them and devour them unobserved, yet alimentation remains always insufficient. The family waits weeks, months, always hoping that the desire for food will return. The repugnance of these patients for eating cannot be overcome by entreaties, supplications, or violence. Then emaciation ensues, and may attain extravagant proportions: it is no exaggeration to say that these patients become living skeletons. And what a life! Cerebral torpor succeeds the unnatural agitation of the first period; for a long time, walking and standing have become impossible; the patients are confined to their beds, where they can scarcely move; the muscles of the neck are paralyzed, the head rolls as an inert mass on the pillow; the extremities are cold and cyanosed, and the wonder is expressed how life can continue in such a physical wreck.

The parents have long been alarmed, but this alarm has reached its climax when affairs have come to this point; nor are such fears without good foundation, for a fatal termination threatens, and I know at least four instances in which death ended the scene.

Such was almost the situation of the little patient of Angoulême, when I received a letter from her father, setting forth the lamentable condition of his child and entreating me to come and see her. Such a journey on my part, I replied, was unnecessary; I could, without seeing the patient, give the proper advice. "Bring the child to Paris," I said, "place her in one of our hydrotherapic establishments, leave her there, or at least impress it upon her mind that you have quit the capital, then let me know, and I will take charge of the rest." To this letter, no reply was made.

Six weeks later, one morning a practicing physician of Angoulême came to my office in an anxious state of mind, and told me that the little patient, whom he had been treating, was in Paris, in one of the establishments that I had designated; that she had been going on from bad to worse, and in all probability had but a few days to live. I asked why I had not been informed of the arrival of the young girl. He replied that the parents had refrained from notifying me because they had resolved not to be separated from their child. To this I responded that the principal element, the condition *sine quâ non* of my directions, had been neglected, and I declined any further responsibility in this unhappy case. Nevertheless, yielding to his entreaties, I went to the hydrotherapic establishment in question, and there I saw a lamentable spectacle: that of a grown-up girl, fourteen years of age, who had reached the last stage of emaciation and marasmus, prostrate in bed, extremities cold and purplish, voice extinct, head drooping, and presenting, in all the leading features, the picture which I have just given you. There was really occasion for being anxious, very anxious.

I took the parents one side, and, after severely remonstrating with them, I told them that there remained, in my opinion, only one chance of success, namely, that they should go away, or seem to go away, immediately, and leave their child to the care of strangers. They might say that they were obliged, for some cause, to depart immediately for Angoulême, and put upon me the responsibility for this procedure. At all events, the child must be made to believe that they had taken their departure, and the sooner the better. Their consent was difficult to obtain, notwithstanding all

my remonstrances. The father, in particular, could not understand why a physician should insist that a parent should separate himself from his child in time of danger; but I was firm in my conviction, and urged it upon them with all my powers of persuasion; the mother yielded first, and the father finally consented under protest, having little faith in the success of this experiment.

The isolation was effected; its results were rapid and marvelous. The child, remaining alone with the Sister of Charity who had care of her, and the resident physician, cried for an hour or two, but mourned much less on account of the separation than one would have expected. That very evening, in spite of her repugnance, she consented to take half of a little biscuit soaked in wine. The days following, she took a little milk, wine, broth, and a small quantity of meat. Alimentation was established, and went on progressively but slowly.

At the end of a fortnight, there was considerable improvement in her condition. She was taking a fair amount of food; her strength returned with plumpness, and, at the end of a month, I saw the young girl sitting in an arm-chair and capable of holding her head erect. She could walk a little; then hydrotherapy was resorted to, and, after two months, dating from the outset of the treatment, she might have been considered as almost well; as far as strength, appetite, and flesh were concerned, there was little left to desire.

Then it was that the young patient, on being questioned by me, made this confession: "Till papa and mamma had left me, and till I saw that you were master (for I well knew that you wanted to make a prisoner of me), I could not be convinced that my case was serious, and, as I had a horror of eating, I refused to eat. *When I saw that you were master*, I was afraid, and, in spite of my repugnance, I endeavored to eat, and my appetite by degrees came back." I thanked her for confiding to me this statement, which is itself a lesson.

IV. I might easily multiply instances illustrative of the favorable influence of isolation, judiciously carried out, in the treatment of certain nervous diseases which do not, strictly speaking, belong to the category of mental alienation, and of hysteria, or even of neurasthenia in particular. What I have just said, in fact, respecting hysterical anorexia, I may also say respecting most forms of the hysterical neurosis. But it suffices me, for the present, to have called your attention to the curative influence of isolation; it is a subject to which I shall have occasion many times to return, without doubt, in this course of lectures, being one on which I have spoken every year for fifteen years, and many of the lectures which I have devoted to it have been published. This method has, moreover, won general acceptance, for I see that in Germany, in particular, as well as in England and America, its efficacy has begun to be authoritatively proclaimed. Therefore, I make bold to claim for ourselves and our institution the priority in this matter, for, if I mistake not, the method legitimately belongs to us, at least as far as the treatment of hysteria and allied affections is concerned. Isolation, in fact, is the capital element in the method of treating neurasthenia and certain forms of hysteria, advocated the last few years by Weir Mitchell in the United States, Playfair in England, and Burkhart in Germany.[1]

V. But I see that it is time to return to our young patients. You will be interested in knowing how they have been faring the last six weeks, since we instituted the treatment in which, in my judgment, isolation has played the principal part. In a general way, amelioration has been observed simultaneously in all three, beginning with the boys, as I have before told you.

The youngest, François, may be considered as well. He has had no convulsive attack for a fortnight, and to-day he has gone home to spend the holiday with his father; I understand that he has stood this test well and triumphantly. I have not quite as good news to tell you of Jacques, the older brother, who, moreover, was the last taken. The *grand crises* have completely left him; nevertheless, they have been replaced by slight attacks of vertigo, quite like those of epileptic vertigo, which, however, have become very infrequent the past fortnight. He did, however, at his father's house, where he accompanied his

[1] R. Burkhart.—Zur Behandlung schwerer Formen von Hysterie und Neurasthenie. (Volkmann's Sammlung, 8 Oct., 1884.)

[In a foot-note, Charcot shows that, while to the school of Salpêtrière belongs the credit, in these modern times, of most effectively systematizing isolation in the treatment of hysteria, yet such treatment is really of ancient date, the necessity of which was recognized by physicians hundreds of years ago. He cites Jean Wier (1564), who, in a book entitled *Histories, Disputes and Discourses on Illusions and Impostures of Devils*, urges the necessity of removing these "possessed" girls (hysterics) from their parents and friends to suitable religious asylums, where suitable moral instruction and discipline might be imparted, and where they might be dispossessed of the demoniacal influence.]

younger brother one day, have one of those slight vertiginous crises which I am in the habit of designating *petit mal hysterique*.

The young girl did not accompany her brothers home, but has remained at the Salpêtrière, for we were far less sure of her than of her brothers. She is, moreover, not yet cured, although from day to day her crises diminish in intensity, in length, and in frequency. She would certainly have got along a great deal faster if, in the ward which she occupies, she had not been in constant communication with patients afflicted with hysteria major, attacks of which she sees every day. But we have not been able to do better by her, not having any separate ward at our disposal. However, her condition has much improved; for, what is pretty decisive evidence, the children have all three of them been several times together in the electrotherapic room without any attack supervening.

I am going to present to you first the boys, then the girl, for, as I have said, I am not so confident of her, and I fear lest the sight of this assembly may disturb her to such a degree as to provoke some sort of hysterical attack. I will also show you, in connection with all three, that the hysterical stigmata have undergone modification, as well as the spasmodic or delirious crises; this is an important fact, for I do not think that we can consider an hysterical patient as cured while the stigmata still persist. Here is little François, aged eleven years; he has advanced the farthest toward recovery. You observe that he has a better appearance than formerly; the tonic treatment and the hospital fare (which is, however, not yet what it should be) have improved his general health. As for the stigmata, I will recall to your mind that these consisted, in his case, in a general anæsthesia limited to the face, and especially to the forehead. He did not perceive odors, and his pituitary membrane was not influenced any more by perfumes than by ammonia or acetic acid; hearing was obtunded, and we could introduce little horns of paper into the external auditory meatus without the sensibility being affected thereby. The general sensibility of the tongue, as well as the taste, was completely abolished; we could put aloes or sulphate of quinine on the tongue without eliciting the least perception of its presence.

In this connection, I may mention that a fortnight ago I showed this little patient to my eminent confrère of London, Dr. J. Russell Reynolds, who was making a brief stay in Paris, intending to call his attention to these troubles of gustation. I own that I was agreeably surprised to see our little man draw back his tongue with a hideous grimace; this indicated to me that our method of treatment had borne its fruits, and that the patient was on the road to recovery. His condition, moreover, has not ceased to improve, as far as the taste is concerned, as you yourselves can judge.

Vision, as you know, presented also quite special disturbances, which, if it is true that they do not properly belong to hysteria, are met so frequently in this affection that we can ascribe to them a great diagnostic importance. The contraction of the visual field was very pronounced on both sides, but, while on the right there was no transposition of colors, on the left side not only was the circle of red outside of the circle of blue, but it also passed beyond that of the white light. A new campimetric examination, made ten days ago by M. Parinaud, showed us that all these troubles had vanished, and that vision had become normal.

I have already told you that the crises had completely disappeared; let me remind you how numerous they were, for they averaged three a day for a long time, giving a total of twenty to twenty-five attacks per week.

I now present to you little Jacques, oldest of the boys, twelve years of age, who was taken last, though less seriously than his brother, and did not have any permanent hysterical stigmata. In him the minor form (*petit-mal-hysterique*) greatly predominated over the major (*grand-mal-hysterique*); nevertheless, there was one time when he was having fifteen fits a week. For the last fortnight, he has had but two attacks of vertigo; one of these happened yesterday under circumstances which I have mentioned. In this connection, I may say, once for all, that cases of this kind are an imitation of epileptic vertigo, or petit mal, nothing more. The epilepsy is only in the form, not in the substance; and, in reality, *petit-mal-epileptic* and *petit-mal-hysterique* are two things radically different.[1] You will remark, furthermore, that, if the general condition of this child has improved, he is still, in many respects, far from being well.

Here is little Julie, the oldest of the three It seems to me that she has grown taller and stouter within a month; at any rate, her condition is much more satisfactory. As to

[1] See, in this connection, I, Bourneville and Regnard, Iconogr. photogr. de la Salpêtrière, t. i, p. 49, and t. ii, p. 202. Bourneville, *Clinical and Therapeutical Researches on Hysteria*, etc. (Compte rendu du service des enfants de Bicêtre pour 1883, p. 100.)

her hysteria, you remember that she was having on an average, every day, four or five attacks or series of attacks which lasted from half an hour to an hour and a half. For the last fortnight, she has not had these fits oftener than twice or three times a week; they are less violent, and hardly last a quarter of an hour. You know that she had certain well-characterized hysterogenous points, situated on both breasts, the external part of both flanks, the calves, the two external malleoli, and the internal part of the right elbow-joint. The zones on the two breasts, the calves, and the right elbow have disappeared; there is no longer ovarian sensitiveness (*ovarie*), but there are a few patches of anæsthesia irregularly distributed on the left side. The hysterical amblyopia, which in her case was very pronounced, has not now existed for ten days; lastly, as I have told you, she can with safety meet her brothers, no attack being provoked thereby.

Such is the situation, and there is every reason to expect that we shall soon see the end of this little family drama, or, if you please, *comedy*, for there is nothing of a very serious or gloomy character in all these events. In about ten days, we shall send the oldest boy home; the youngest goes to-day, and the girl will leave us a little later.[1]

I present for your meditation the lesson which the story of these children brings with it. I believe that by means of the measures which I have set forth we may sometimes succeed in nipping in the bud, especially in males, nascent hysteria, hysteria of childhood. I am now speaking of this latter only, for, when this neurosis has become inveterate in adults, the chances of success, though still great, are much more doubtful. As far as these children are concerned, I believe that, despite the nervous predisposition which seems so pronounced in all of them, they will henceforth, for a long time, if not forever, be free from hysterical manifestations. The parents, taught by sad experience, will certainly henceforth keep them from the practices of spiritualism. Knowing the weak points in their children, they will endeavor, I hope, by the help of a hygienic discipline, which shall comprehend as well physical as intellectual and moral culture, to avert any further occurrence of like untoward incidents.

[1] The youngest of the boys is to-day completely cured; for more than a fortnight, the girl has had only one slight attack during a visit of her parents at the Salpêtrière.

Communications.

SEA-SICKNESS.

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I have often been asked to write out my experience with this most distressing complaint. It has been my good fortune to make many voyages, of various lengths, and to come in contact with a variety of people, in all parts of the world; and, though I respectfully submit to the much greater experience of my professional brethren who are in the merchant marine, I think the knowledge one acquires of human nature by a shore-practice often enables one to detect peculiarities in individuals that form strong indications for treatment.

Sea-sickness is a queer symptom; for a symptom indeed it is, having many causes. It will often fight shy of the most delicate individual, and then lay low the boastful traveler who cannot count his voyages on his fingers, and who "never was sick before in his life." It is not, as some would say, a result of imagination, for children are often sick at sea, and sometimes very sick, and animals frequently die of it; nor is it due always to the motion of the vessel, as persons are frequently made ill by the very thought of being at sea, when the vessel is still in the dock. My own opinion is that it is due to two causes: first, one purely reflex, independent of any gastric irritation whatever, due to loss of vaso-motor tone and the occurrence of disturbance in the cerebro-spinal centre as the result of diminished or disturbed arterial tension; or as a reflex from the organs of special senses, especially sight and smell, or the oculo-motor nerve, or the pneumogastric terminals. Of course, the exciting cause of this may occur anywhere, at sea or on shore. Some of these causes are: a shock, a nauseating odor, the motion of a swing, an empty stomach, a sudden change of position —such as rising suddenly from a stooping posture—tobacco-poisoning; and hundreds of other things may cause nausea, which is exaggerated a hundredfold if the person is at sea.

Let us call this variety the nervous form. It is most common in women, and in nervous men overworked mentally. If there is no actual nausea, there is likely to be a feeling of uncertainty, or vertigo may be present,

or a feeling of faintness or of cold. Sometimes the symptoms are giddiness, cold perspiration, or a tight band around the forehead.

This is the form of sea-sickness that is relieved by whatever stimulates the nervous system, increases arterial tension, acts as a sedative by increasing the force and tone of the circulation. We will speak of this more at length hereafter.

The other form I may call the bilious. Bile has, probably, nothing to do with it, unless, perhaps, by constant retching, some bile may regurgitate into the stomach, and add to the nausea and vomiting. The word "bilious" is nowadays used to describe the result produced by a digestive tract which is overloaded with undigested food, and contains mucus, matter undergoing fermentation, and ptomaines, by which we mean poisons resulting from decomposition. These conditions are found in high livers, persons who have overcharged themselves with rich food, drunk to excess, or who are constipated—men who, for a week previous to the voyage, have had parting dinners, or young girls at puberty who are chlorotic, or who are of the bilious type. The least thing, even on shore, would nauseate these individuals; they probably, at all times, wake up with a coated tongue; the thought of breakfast turns against them; their bowels are constipated, the urine scanty and high-colored; they suffer from flatulency, are languid, and life to them looks dark and gloomy; in the language of social science, they are pessimists. Now add to these derangements the motion of a ship, the smells from the kitchen, the steam and the hot oil, and sea-sickness is bound to result. These are the patients that are "so much benefited by sea-voyage." Nature has found a means of opening their safety-valves!

We have here the two classes of persons who suffer from sea-sickness; of course, the classes are not always absolutely separable.

The bilious-nervous temperament is a well-known type; nevertheless, as far as treatment is concerned, it is as well, as far as possible, to distinguish the individual type.

We may divide the treatment into two classes, the preparatory and the actual. Persons who contemplate a sea-voyage should, to a certain extent, prepare themselves for it.

It is a great mistake to use active purgatives, such as the various pills that command a ready sale; these often stir up secretion and bring on sea-sickness, or else they so weaken the circulation and nervous system as to greatly diminish arterial tension.

A day or two of careful nutritious dieting, restful sleep for a night or two before sailing, a daily laxative—preferably a dose of Hunjadi water in the morning, Tarrant's aperient, sal muscatelle, Hathorn (Saratoga), Rubinat water, or an enema at night to unload the rectum—this is infinitely preferable to a mercurial purge, except in the case of a person who has overloaded his stomach, and congested his liver by over-eating, and has possibly been indiscreet in the use of stimulants before sailing. In such a case, a blue pill followed by a dose of castor oil is a necessity.

These directions govern all classes of cases, and are simply matters of common sense.

As regards the special medical treatment, many suggestions have been made by medical writers, and some are of value. The use of bromides has been advocated, in small doses by some, in very large doses by others. Their use is specially advocated for persons of a nervous temperament, in whom it is expected that the bromides (the soda salt agreeing better than the potassium) will control the vaso-motor system and diminish the reflexes. Possibly large doses may have succeeded in some cases, but I fear the remedy is more dangerous than the disease. Others have for several days previous to the voyage advised small doses (ten to fifteen grains) of one of the bromides, along with tincture of nux vomica, five or ten drops. Certainly this treatment can do no harm, and may be tried.

I may say here that I am very much opposed to experimenting in these cases with such a powerful drug as antipyrine. It is a most valuable remedy in severe illness, but a dangerous compound to play with.

The use of caffeine has been highly recommended by some; indeed, a small cup of strong black coffee will often control reflex nausea when nothing else will. The combination of these drugs, associated with the local sedative effects of carbonic acid gas, has become quite popular, and I am sure the valuable preparation of Warner, called bromo-soda (bromide of sodium), and caffeine in granular effervescent form, will become very popular upon sea-voyages. Keasbey & Mattison's bromo-caffeine (the hydrobromate of caffeine) has also been used with success; these may be used for several days preparatory to the voyage. The granular effervescent oxalate of cerium has also

been extolled as a remedy for reflex nausea. The hydrochlorate of cocaine has recently had many advocates; indeed, the preparations of cocoa, including the Vin Tonique Mariani and Thé Mariani, are highly recommended. There are some people who are said to be very susceptible to the use of cocaine; therefore, some caution must be used in its administration. I would begin with the twentieth of a grain at the onset of the voyage, and repeat according to its effect.

We will then take it for granted that, as far as possible, the individual starts on the voyage in good physiological condition; the bowels are free from accumulation, the stomach is at rest and normal, as far as its contents and secretions are concerned. The nervous system has also probably been quieted by refreshing sleep, or soothed by a mild bromide mixture, and the vaso-motor system holds its grip on the circulation, strengthened by an agreeable tonic, such as Vin Mariani with a few drops of tincture of nux vomica, or the elixir of calisaya bark and one-sixtieth of a grain of strychnia sulph. In many cases, all that is required is simply to maintain this condition of health: live on deck in the open air; seek occupation that will be pleasant; enter into the enjoyment of the trip; join in the games, the discussions, the walking-matches, or become the victim of an absorbing novel. Keep away from the smells, and, if you are uncertain of yourself, keep away from the dining-room, and only seek your state-room at night for sleep. I have often seen young women hourly struggling through the first days of a voyage, wrapped up like North Pole explorers, stretched on the sea-chairs with a plate of olives and crackers by them; or, occasionally, this frugal repast is varied with a roasted potato, dry and mealy, with only salt as a condiment, and an occasional sip of champagne, or brandy and cracked ice, or ginger ale. The latter is better and more laxative, if combined with Apollinaris water, and is an excellent stomachic. Mr. F. E. Morgan, of this city, has prepared an elixir of whey, which contains whey, brandy, and suitable flavoring, which make it highly nutritious and stimulating. A wineglassful of this, with cracked ice, I have frequently known to allay gastric irritability from reflex causes and debility. Gradually, then, the circulation will adjust itself to the motion of the ship.

When it comes to the question of diet, a difficult problem is presented. Ships' cooking always, more or less, has unpleasant associations to the voyager who is balanced just on the verge of nausea, and, do what they may in the kitchen, the soups and meats flavor of the ship. On all sea-going vessels, there should be a plentiful supply of the many excellent preparations now given us for sick-diet, such as Valentine's beef-extract, with a little cracked ice and brandy, and Carnrick's liquid peptonoids, an excellent nourishing preparation. Bovinine, when flavored with celery-salt, or Leube-Rosenthal's beef solution, or Rudisch's sarcopeptone. As fresh milk is an impossibility, we could resort to such preparations as Borden's or Canfield's condensed milk, with Mellin's food, malted milk, Carnrick's milk food. All these are very palatable and very nutritious, and certainly a few of them should be found on every vessel carrying passengers

Some individuals give up at once, and require medicinal treatment. Possibly such preparations as the following may be found of service:

℞ Vin. ipecac. . . . . ♏viii
Tinct. nucis vom. . . . . ♏viii
Elix. lactopeptine . . . . . q. s. ad f℥i

M. Sig. Teaspoonful in water every half-hour, or every hour, till half a dozen doses are taken.

Or

℞ Sodii bromid.,
Potass. bromid. . . . . āā gr. xxx
Tinct. capsici. . . . . ♏vi
Syr. zingib. . . . . f℥i
Aquam . . . . . q. s. ad f℥iii

M. Sig. Tablespoonful every hour.

Or

℞ Cocaine hydrochloridi . . . . . gr. ⅛
Acid. nitromuriat. dil. . . . . ♏xl
Elix. pepsini . . . . . q. s. ad f℥ii

M. Sig. Dessertspoonful in wineglassful of water every hour till four doses are taken.

Or

℞ Morphiæ acetat. . . . . gr. ¼
Acid. hydrocyan. dil. . . . . ♏ii
Elix. orang. amar. (rub.) . . . . . f℥ss

M. Sig. Teaspoonful in water every hour till four doses are taken.

Or

℞ Elix. quiniæ, ferri et strych.

M. Sig. Teaspoonful every four hours in water.

But there are some who, notwithstanding all attempts, whether from the want of will-power, fresh air, or medicine, certainly suffer so severely with sea-sickness as to make it imperative for them to remain in their berths. Indeed, even then the disturbance may be so great as to threaten life and to require energetic medical treatment.

For such, an absolute recumbent position

is required, stimulants and food in very small amounts, in the most palatable and nutritious form; cracked ice, which will frequently allay the irritability of the stomach, an ice-bag to the forehead or the nape of the neck or *down the spine*, and counter-irritation to the epigastrium—as a mustard poultice. Indeed, in many cases the hypodermic use of morphia and atropia will often quiet the nervous system and give more relief than anything else. Persons who really suffer to such an extent as this should not be forced on deck; they are far better off, for a few days at least, in their berths, especially if they can get fresh air from an open port-hole. Especially is this the case with delicate women who suffer from dysmenorrhœa. I believe these are especially apt to be sea-sick if their period should come on whilst on the voyage.

Cologne, bay-rum, camphor, aromatic ammonia will often control the reflex from the sense of smell, and should not be forgotten when arranging the medicine-chest for the ocean-voyage.

I have jotted down a few hints in this paper, some of which may be of value, and and most of them have stood the test of personal experience.

Let me add one more observation: there is too much attempt at faulty cooking upon most of the transatlantic steamships. The food is too heavy, too highly seasoned, and difficult of digestion. A clean well-served table, with tempting dishes simply cooked and of sufficient variety, will form an attraction that few steamships possess. As a rule, the tea which is served is good, the coffee atrocious. Very little attention is paid to the preparation of breakfast, and nothing whatever for the average stomach is provided at the last meal. When the patient has reached the stage at which he can take anchovy toast, grilled bone, and Welsh rarebit, he has his sea-legs on.

THREE CASES OF PARTIAL RETENTION OF THE PLACENTA AFTER LABOR AT TERM.

BY CHARLES P. NOBLE, M.D.,
PHILADELPHIA.

Case I.—Mrs. S., æt. 23, has had four children and one miscarriage. She fell in labor April 12, 1886, at 7 A.M.; pains were feeble and infrequent till noon. I saw her at 3 P.M., and found the membranes ruptured and the os dilated to the size of a dollar. Presentation, vertex, L. O. A. Dilatation was slow and painful. At 6.45 P.M. a powerful pain forced the head through the cervix, and delivery was soon completed. The placenta was delivered by the Credé method; more than usual difficulty was experienced. The cotyledons were somewhat separated, but, after a careful examination, which I always make, I considered the placenta entire. A drachm of Squibb's fld. ext. ergot was given, and this was subsequently repeated. I was called the following morning, and found that the patient had passed a restless night; had suffered from severe after-pains; pulse 110. Ergot was continued in smaller doses, and ten drops tr. opii deod. given every two hours. 3 P.M., had slept some; pulse 120; temperature 104° F. Had passed urine naturally. Full doses of quinine were ordered, and the temperature fell to 100°. Until the 16th, the temperature varied from 100° to 102°; pulse from 90 to 110 per minute. The flow was scanty, but not offensive. The treatment was quinine, with poultices to the hypogastrium. The night of the fourth day, the lochia became offensive, when vaginal injections of sublimate solution, 1–4000, were begun, and half-drachm iodoform suppositories ordered. The fifth day, the pulse fluctuated from 85 to 110, the temperature from 101° to 103°; same treatment. Sixth day, consultation with Dr. D. Longaker; pulse 90, temperature 101.4°. Careful digital examination revealed adherent placental tissue, and an unsatisfactory attempt was made, without ether, to remove it. The uterus was irrigated, and an iodoform suppository introduced. Two grains of quinine and half-drachm fld. ext. ergot were ordered every three hours. These manipulations were shortly followed by a chill, with a temperature of 104.2°. Seventh day, temperature and pulse lower, treatment the same. Eighth day, under ether, Dr. L. removed the remaining placental tissue, using his finger as a curette. The uterus was irrigated and an iodoform suppository introduced. In about one hour, the patient had a severe chill, temperature 104°, followed by profuse cold sweats. Ninth day, temperature 101°, pulse 105. She felt well, and was hungry. Quinine in tonic doses, digitalis, and milk punch were given, and vaginal injections continued. On the twelfth day, her pulse was 90, temperature 100°, and they became normal on the fourteenth day. The fetor also disappeared from the lochia, and the injections were omitted. Under the use of Basham's mixture, with strychnia and nourishing diet, the patient rapidly recovered.

Among other points of interest in the case were the absence of special tenderness over the uterus, the ability to pass urine naturally, the chill after intra-uterine manipulation, and the rapid improvement after the uterus was entirely emptied.

Case II.—Mrs. G., æt. 24, primipara, was delivered February 4, 1888. There was nothing of note in the labor. The placenta was expressed by the Credé method. The cotyledons were somewhat separated, but the placenta was considered entire. Slight fever appeared on the third day and continued through the first week. The pulse ranged from 90 to 100 beats, and the temperature never exceeded 101° F. The patient felt fairly well. An examination on the fourth day revealed a fragment of placenta less than half the size of the little finger. This was removed, the uterus irrigated with sublimate solution, and a hundred-grain iodoform pencil introduced. Vaginal injections were continued. There was some fetor during the first few days. Ergot and quinine were used internally. Mrs. G. recovered her strength slowly under Basham's mixture, with strychnia. It seemed remarkable that so small a fragment could cause any disturbance, yet she improved from the day it was removed. The urethral catheter was not used.

Case III.—Mrs. S., already referred to as Case I, was delivered of her sixth child, April 1, 1888. Labor began by rupture of the membranes, was completed in three hours, and presented nothing of note. The placenta was expressed, as in the former labor, with some difficulty. It was considered entire. On the second day, while examining the abdomen, I noticed some fetor, but, as the patient's pulse and temperature were normal, it was attributed to insufficient cleansing. (And here I may say that the plan of examining the abdomen at each visit during the first week, I consider a most valuable one. The adjustment of the binder is a good excuse, if any is necessary. The involution of the uterus can thus be watched, and valuable information gained. It is very easy to hold the nose near the pubes and thus observe any odor of the lochia, and this without attracting the patient's attention.) Sublimate solution, 1–4000, had been employed for washing the genitals, and the nurse, a neighbor, was directed to cleanse them more carefully. On the morning of the third day, there was still no fever, but the fetid discharge continued. An iodoform pencil was introduced into the vagina. In the evening, the pulse was 100, temperature 102° F. The vagina and uterus were at once irrigated and examined. A fragment of placental or decidual tissue, not larger than a bean, was found and removed, and a fifty-grain iodoform pencil was left in the uterus. Fourth day, the pulse was 90, temperature 100°, and the discharge was still fetid. An attempt to introduce the syringe-nozzle within the uterus was unsuccessful and caused considerable pain. A half-soft catheter was obtained and attached to the syringe. The catheter was introduced and the uterus washed out without further difficulty. In about thirty minutes, the patient had a violent chill; pulse 140, temperature 103°. Stimulants were used. In the evening, the pulse was 90, temperature normal. The pulse and temperature became permanently normal after the first week, when the putrid odor likewise disappeared. At no time was urination interfered with. The uterus was irrigated once daily, by means of the catheter; the vagina twice or three times. Internally, ergot, full doses of quinine, and milk punch were given. Basham's mixture and strychnia were ordered later as a tonic. The convalescence was interrupted by an attack of mastitis, which resolved under the roller bandage and rest treatment.

These three cases embrace my experience with partial placental retention after labor at term. Having always exercised great care in examining placentæ, I am convinced that it is not always possible to be assured that the placenta is entire. Where the cotyledons are not separated, and where no fractures in the placental tissue are present, this is, of course, simple. Likewise, no difficulty could be experienced in determining the loss of large fragments. But, where a friable placenta is much fractured and the cotyledons much separated, it is very different, and the absence of small fragments will escape even minute inspection.

The fact that putrefaction of the placental tissue resulted in each case is of interest. The women were both poor, and neither had an efficient nurse. Had strict antisepsis on the part of the nurse and patient been possible, perhaps the patients would have escaped infection and the placental tissue been cast off without putrefaction. However, the relation of non-pathogenic bacteria, so constantly found in the vagina, to putrefaction, is by no means thoroughly understood. In these, as in all other cases, I carefully cleansed and disinfected my hands before touching the genitals; but full

antiseptic precautions were not employed, for the reason that the neighbor-nurses had neither the intelligence nor training to be trusted with agents so potent for harm as well as good. It has been the greatest relief to me, when septic trouble has developed among my patients, to know that I had practiced personal disinfection.

Another point of interest is the chill which so often follows intra-uterine manipulations in septic cases after abortion and at term, especially where infected placental or decidual tissue has been removed. It is not so common after simple irrigation. The effect is, at first, to prejudice one against the method, for the chill and prostration are truly alarming. But observation shows that these apparent bad effects are but temporary, and rapid improvement usually follows the cleaning-out and disinfection of the uterus—perhaps always, if the action has been prompt. While nervous influences doubtless play an important part in the production of the chill, yet it must be admitted that momentarily increased absorption of poisonous material through abrasions caused by the finger or instrument is also a factor. Hence the utmost gentleness, not only during the removal of the retained mass, but in the subsequent irrigations, is of the utmost importance. For the same reason, the finger is the best curette; and, besides, by it alone is it possible certainly to determine that the uterus is empty. Under anæsthesia, it is easy to explore thoroughly the uterine cavity with the finger. Four fingers can be inserted into the vagina, and the uterus depressed from above, if necessary. In discussing these cases, it is unnecessary to consider the propriety of intra-uterine manipulations in the presence of circum-uterine inflammation; but in cases seen early, where absorption of putrid material, and perhaps invasion of the tissues by pathogenic micro-organisms, is taking place from the uterine cavity, there is no doubt of the propriety and advantages of clearing out foreign matter and irrigating the uterus until it is thoroughly disinfected.

The urine was passed naturally in each of the three cases. From a diagnostic point of view, this fact is of importance, as it points to the uterine cavity as the seat of absorption of septic material. During the first and second days, urination is often prevented by tumefaction of the urethra, caused by pressure of the head during a delayed second stage. Some days later, it may be interfered with by the pain caused by straining where circum-uterine inflammation or marked metritis is present. But retention of urine, occurring from the second to the fourth day, is almost always due to septic endocolpitis. Hence, when septic fever begins at this time, and urination is normal, the vagina can be almost excluded as the point of absorption.

In each of the three cases, after-pains were sufficiently marked to attract attention, especially in the first case, in which the largest mass was retained.

In these cases, the fever was due to putrid infection rather than to invasion of the tissues by micro-organisms. It is in cases of putrid infection that early local treatment gives especially brilliant results. The treatment of Case I, during the first few days, is an example of what should not be done. In no other class of cases is an early diagnosis of more importance, nor are temporizing measures likely to lead to more serious consequences.

ANTIPYRINE AND ITS USES.

BY HARVEY B. BASHORE, M.D.,
WEST FAIRVIEW, PA.

Dimethyloxyquinizine is a complex substance derived from chinoline. Its more common name of antipyrine is that under which the German manufacturers hold their copyright. It is sometimes adulterated with benzine and phenylhydrizine, but the pure drug is easily distinguished, as it does not change litmus-paper, while the impure does. It is very soluble in water and alcohol, and is best administered by dissolving it in half a glassful of ice-water, the dose being from 3 to 30 grains; or it can be given hypodermically when a very rapid effect is desired. Its *physiological action*, according to Denian, is very complicated—in large doses it may produce constipation, is quickly absorbed by the mucous membranes of the intestines, and is eliminated by the skin, kidneys, and intestinal glands. In large doses, it dilates veins and capillaries, and from this cause its antipyretic effects are partly due: it is said to modify the heart and circulation, and on the nervous system has a decided action. The effect on nutrition is to diminish general disintegration, and particularly disintegration of nitrogenous materials. The therapeutic action I have arranged under various headings.

(1) *Antipyretic.*—Pavy administers it with good results in the following manner: If the temperature is 103° F., he gives 30 grs. in 10-gr. doses every half-hour; if 104°,

he gives 45 grs. in 15-gr. doses every half-hour; if 105°, 60 grs. in 15-grain doses every half-hour. Hamilton, in his India practice, gave 30-gr. doses when the temperature was as high as 104°; if, after an hour, the temperature was 101.2°, he gave the same, and, after another hour, he gave a small dose, if the temperature was 100°.

He reported no evil effects from its use. In heat-stroke, hypodermic use of the following solution is very satisfactory:

℞ Antipyrini . . . . . ℥ii
Aq. dest. . . . . q. s. ad f℥ss
M. Sig. ♏xx = gr. x.

Burtzeff, in his observations, claims (1) that antipyrine is inactive in malarial fevers; (2) that doses of 30–50 grs. lower the febrile temperature 0.5°–2.8° (Centigrade), the fall lasting from five to eight hours; (3) that it sometimes causes nausea, vomiting, and drowsiness.

(2) *Analgesic.*—Dr. White, of the Charity Hospital, has found great relief in headache by giving a single dose of 15 grs. The relief generally comes in about half an hour. He says a sense of drowsiness ordinarily supervenes, followed by a brief slumber, and the patient awakens quite relieved from distressing symptoms.

At St. Bartholomew's Hospital, twenty-six cases of migraine were treated with antipyrine, with great satisfaction in each case, although the dose did not exceed four grs. Generally relief was obtained after giving the second dose of three grains half an hour after the first.

Professor Sée had equally good success, drawing his conclusions from forty-two cases of migraine, in each of which he administered fifteen grs. at the onset of the attack, and fifteen grains one hour later. Usually, the pain disappeared in from twenty to thirty minutes after the first dose, the second acting the part of a preventive. In cases of facial neuralgia, his results were also very gratifying, the treatment being seventy-five grains per day in five doses of fifteen grains each. He also used, in various cases, hypodermic injections of 7½ grains in 22½ grains of water, adding one-sixth gr. of cocaine to each injection.

Intercostal neuralgia is reported to have been cured by giving ten-grain doses three times a day.

In headache, Lyman used an initial dose of fifteen grains, repeated every two or three times if necessary.

In acute and subacute rheumatism, Clement found that antipyrine did much good in those cases in which salicylic acid was of little use, and that it was innocuous even in cases of cardiac and renal trouble, but of no value in chronic rheumatism.

In colicky pains of the stomach, antipyrine injections can be substituted for morphine, with very good results.

(3) *Hæmostatic.*—To control hemorrhage, Hénocque uses antipyrine in powder or solution. In epistaxis, the powder can be snuffed up the nose; for hemorrhage from the uterus, it can be applied to the cervix or to the cavity; for wounds in general, he uses a five per cent. solution. Dr. Powell used a four per cent. solution on wounds, and had excellent results.

Dr. Groetz, of Geneva, used it in three cases very successfully, both in solution and in powder.

(4) *Phthisis.*—Dr. Zahrzhevski used it in the Helsinfors Hospital, preferring the hypodermic administration. In the case of a man fairly robust, it required ninety grains to produce the best effect, while in greatly debilitated cases from ten to fifteen grains were sufficient.

Dr. Daremberg says that consumptives may use from 48 to 96 grains daily for months with exceedingly good results.

Dr. Dujardin-Beaumetz cautions against too large a dose in phthisis, considering eight grains sufficient.

Sakrsheroski claims that the hypodermic use of from ten to fifteen grain doses, continued for a considerable length of time, produces marked beneficial results.

(5) *Labor.*—Dr. Queirel claims that it calms the excitement and lessens the pain, being most beneficial during the first stage, and that it does not interfere at all with the progress of labor. He administers it hypodermically, in doses of four grains, giving a second in two hours if the first does not produce the desired effect.

Professor Chian draws conclusions from twelve cases that it has no effect on pregnant women other than that of an antipyretic.

Toxicology.—In one case of enteric fever, a thirty-grain dose was followed in about four hours by a fall of temperature from 104° to 95°, accompanied by alarming collapse, sighing respiration, cold extremities, clammy surface, and feeble pulse; under stimulation, the patient quickly recovered.

In a case reported in the London *Lancet*, a woman, 67 years old, was given 37½ grains per day for eight days, when the skin of her arms became covered with erythematous patches, her eyes became uncomfortable, and her feet were icy cold. Neither nausea

nor giddiness was present. The next day, her face was red and extremely swollen, and the rash became very general. This condition gave rise to no suffering, and there was only slight itching; but the patient felt as if "the inside of the body was filled with ice." The symptoms gradually disappeared upon withdrawing the drug.

In another case reported by the *Lancet*, there was swelling of the body and also of the inside of the throat, which was obstructed to such an extent that for six hours she was threatened with suffocation. The skin was covered with red spots, without itching, and the perspiration dripped off the extremities of the fingers.

The chief benefits of antipyrine seem to be those derived from its action as an antipyretic, an analgesic, or a hæmostatic. When carelessly used, it may seem to be valueless, or even worse than valueless; but, when rightly used, it promises to be a drug from which we can expect brilliant results.

MIXTURE OF IODINE, IRON, POTASH, SALICYLIC ACID.

BY J. B. JOHNSON, M.D.,
WASHINGTON, D. C.

The following is the manner in which I form a combination of iodine, iron, potash, and salicylic acid:

No. 1.

℞ Tincture of iodine . . . . . f℥j
Distilled water . . . . . f℥vj
Chloride of potassium . . . . . ℥j
Mix and dissolve.

No. 2.

℞ Distilled water . . . . . f℥ii
Bicarbonate of soda . . . . . ℥i
Salicylic acid . . . . . ℥ii
Sol. of citrate of ammonia . . . . . f℥ix
Tinct. chloride of iron . . . . . f℥ii
Glycerine . . . . . f℥ii
Distilled water . . . . . q. s. ad f℥vj
M.

This No. 2 mixture should be carefully made in an eight-ounce graduated glass measure; and, when prepared, should be added to formula No. 1. By this adding of formulas Nos. 1 and 2 together, a beautiful wine-colored solution is produced, which is by no means unpleasant to the taste. The mixture may be made more elegant by the addition of six fluid drachms of elixir of orange, or twenty drops of oil of gaultheria. The dose is a tablespoonful after eating. I use this mixture, with great advantage, in all cases of a strumous and debilitated condition, requiring an alterative and tonic for their treatment. By adding fifteen grains of bromide of potassium to each dose, and its use commenced about ten days before the expected period, I have found this mixture to be the best I have ever used in the treatment of painful menstruation. I have found gleet to yield to the use of this mixture more rapidly than to any other medicine, especially if the bromide of potassium is added in suitable doses. In cases of disorders of the stomach, attended with fermentation of the food, it acts well if taken a half-hour after each meal. It acts well in removing lithate of ammonia from the urine, and forms a most excellent tonic for children if given in teaspoonful doses every four hours.

A CASE OF HYDROCEPHALUS.

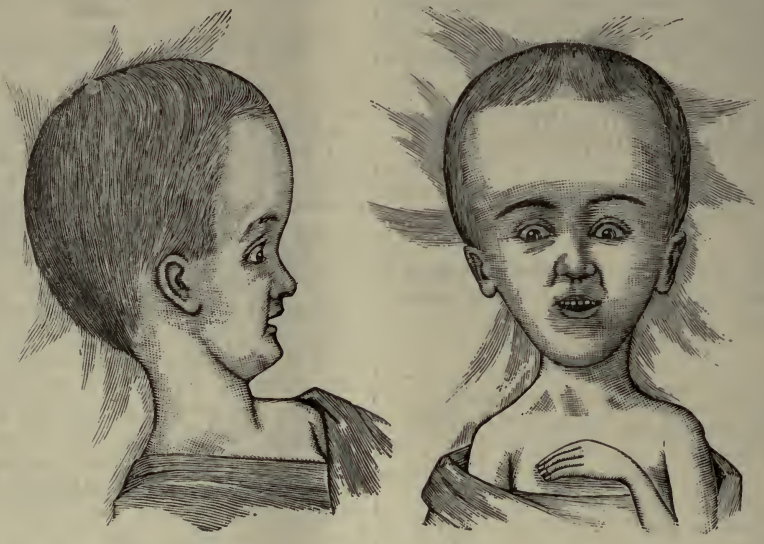
BY WILLIAM B. DEWEES, M.D.,
SALINA, KANSAS.

Albert Fechtig Pitzer, son of Phillip T. and Margaret D. Pitzer, was born May 5, 1879. He was the tenth child born of his mother, who experienced nothing unusual during the gestation and delivery of this son, nor was there anything unusual in the child's appearance at birth, excepting an overlapped condition of the parietal bones in the inter-parietal or sagittal suture. The child did apparently well until one week after its birth, when it was seized with convulsions, the attacks succeeding each other so rapidly that the mother counted over a hundred in a few days, and ceased to keep record of them; they continued for several weeks, and then quit for a week or more. Exactly four weeks after the beginning of the first attack, a second series of convulsions began, continuing about the same length of time, but leaving the child paralyzed (hemiplegia) on the right side for over one week. Precisely four weeks from the beginning of the second attack, a third series followed, this time leaving the child's left side paralyzed for over a week, the child lying in a comatose condition for twenty-four hours after the convulsions ceased before it commenced to show life by moving its limbs, etc.

Four weeks, to the day, following the beginning of the third attack, a fourth series began, this time leaving the child paralyzed bilaterally for several weeks. From this time on, his head began to enlarge, and convulsions continued at irregular intervals

up to the present day (July 12), the child having one in a week, or one in a month, and sometimes as often as three or more a day. He has always slept well; he eats well, but his bowels never have moved, with but few exceptions, since his birth, unless by artificial aid, cathartics, clysters, etc. The parents have noticed that every fall in the year, when the cow (the milk of which is fed to the child) is allowed to eat *ragweed* (*ambrosia trifida*), that this has the effect of moving his bowels for several days or more, regularly, but that this is the only thing that they have discovered thus to relieve him.

The child has never manifested any intelligence, and does not recognize anything, not even when looking at an object. It gives expression to a little noise when it hears its father's voice, and also seems to recognize by similar noises when its mother talks; it also quiets down when the mother speaks to it, saying "Now, my good boy, be quiet, and mother will bring you something good to eat." It never manifests any signs of hunger or thirst, but will eat and drink whenever food is offered. Its head now measures twenty-eight and a half inches in circumference, occipito-frontal measurement. As to the family history, there is consumption on the mother's side; history upon the father's side good. The mother now has had eleven children (one being born since this boy), the first five of which died when from one to five months old; in all, seven are dead. The mother is 38 years of age, and the father 43 years.



Society Reports.

PHILADELPHIA CLINICAL SOCIETY.

Stated Meeting, June 22, 1888.

The President, Dr. Mary E. Allen, in the chair.

Dr. Amy S. Barton read a paper entitled

A Case of Placenta Prævia, followed by Purulent Endometritis.

J. M. presented herself at my office November, 1880, with the following history: Married seven years; has one child, six years old; has never been well since the birth of child. Upon examination, I found a stellate laceration of cervix uteri, the rents being bilateral and posterior; lips everted and covered with exuberant granulations. Perineum lacerated, with prolapse of posterior vaginal wall. Patient's general health poor. Under ordinary local and constitutional treatment, the condition was improved sufficiently to warrant an operation; accordingly, I performed trachelorrhaphy, fourth month, 6th, 1881, uniting only the two lateral fissures. This was followed by perfect union. On the tenth day, I removed the stitches and restored the perineum, which united nicely, the patient making a good recovery. I was subsequently engaged to attend this woman in confinement, November 26, 1882. Early in the evening of the 23d, a hasty summons was sent for me, but, being out of my office, I did not reach the house until 8 P.M. I then learned from the

excited bystanders that at 4 P.M. the patient, when she was rising from a nap, passed a small quantity of blood, without any uterine pain. She immediately dressed, went downstairs, and prepared tea for herself and family; while doing this, she tripped over a brush on the cellar-stairs, but did not quite fall. About 6 o'clock, after taking her seat at table, while perfectly free from pain or any local sensation whatever, she was seized with a violent hemorrhage. How much blood was lost I am unable to state, as it had been scrupulously cleaned up before my arrival. I can only testify that the clothing—a heavy flannel wrapper and her skirts — was thoroughly saturated. The patient walked upstairs, stood while her clothing was changed and bed prepared, then fainted as she lay down. At this time the hemorrhage ceased. When I arrived (at 8 P.M.), I found the patient rallying from the shock, but very pale and weak. No hemorrhage; os uteri soft; dilatation just commenced; fœtal pulsations good. Gave a suppository containing extract belladonna gr. ss., pulv. opii gr. i, brandy by the mouth, and awaited results.

At 10 P.M. another hemorrhage occurred; moderate in amount. The patient had a nervous chill, shaking violently; pallor was extreme, and she looked as though dying. I immediately made another examination per vaginam; found the placenta on the lower segment of the uterus, to the left side, covering the open orifice of the os uteri. By passing my finger well to the patient's right, the border of the placenta could be reached, but in no other direction could the border be felt. I at once applied a tampon, which checked the flow, and, after the administration of brandy, the patient soon rallied.

I now sent for Dr. Hannah T. Croasdale, who arrived at 11 P.M., at which time the patient was comfortable; no uterine contractions of any moment. At midnight, the fœtal pulsations were good, even vigorous, and the patient was doing apparently well. We determined to await further dilatation before attempting to extract. In our judgment, the operation of turning, at that time, would subject the mother to imminent risk from hemorrhage, and there was not sufficient dilatation for the use of forceps.

I had administered quiniæ sulph. gr. x at 11 o'clock, which had been vomited. At midnight, the dose was repeated, with the same result. Repeated doses of fluid extract of ergot were given; the dose was sometimes retained for half an hour, but was generally vomited. There were occasional slight uterine contractions, no doubt resulting from the small amount of the drug which was retained.

The patient dozed, at intervals, between midnight and 2.30 A.M. Pulse feeble; nausea extreme. Owing to the extreme prostration, and the fact that there was no return of the hemorrhage, I deemed it improper to disturb her by listening for fœtal pulsations, thinking, because the fœtus had survived the last hemorrhage for two hours, it was safe until another occurred. I was shocked at 2.40 to find the pulsations were gone. The cervix had relaxed and shortened sensibly during the last three hours. We decided to etherize immediately, and deliver with forceps, if possible; otherwise, by turning.

I introduced my right hand, pushed the placenta away, to the right, and found the membranes unruptured. I ruptured them, and found no difficulty in applying the forceps to the head, which presented in the first position. It was still above the superior strait. The head was brought down to the perineum without difficulty, other than the use of considerable force. The perineum reached, it seemed impossible for the head to pass the vulvar orifice without lacerating the soft parts. We, accordingly, made lateral incisions of the labia, removed the forceps, and enucleated the head, making pressure through the posterior portion of the perineum and rectum. Just after the delivery of the head, the abdomen suddenly enlarged at the umbilicus. An attempt was made to deliver the body rapidly, but this was found impossible. My hands having become fatigued, I requested Dr. Croasdale to deliver the body for me, which she did with difficulty, it seeming too large to pass the vulvar orifice. Immediately after the removal of the child, I passed my hand into the vagina and brought away the placenta, which was entirely detached. There was no hemorrhage, and the uterus was well contracted. The peculiar appearance of the abdomen suggesting internal hemorrhage, I insinuated my fingers, and finally my whole hand, into the uterus, and found it empty. In a moment it relaxed, but responded promptly to the stimulus of hot water injections. There was no hemorrhage after this, and the patient rallied well from the ether and shock.

The perineum was not lacerated at all, and there was but slight laceration of the cervix, anteriorly; not sufficient, in our opinion, to justify the immediate operation,

considering the patient's condition. It is worthy of note that the laceration did not occur in the line of the old cicatrices, which were on each side

The child weighed 12½ pounds, the body being disproportionately large. The mother's weight, in health, is 90 pounds.

While I was attending to the mother, Dr. Croasdale made every effort to resuscitate the child, using hot and cold water alternately, artificial respiration, etc., but without avail.

The patient did well until the third day after delivery, when her temperature rose to 100°, pulse to 120. As this was coincident with the establishment of the lacteal secretion, it was supposed to be due to that, as there was no abdominal tenderness whatever. There was slight distension from flatulence, but this was entirely removed by having the bowels freely evacuated, and after this date an evacuation was secured each day by enemata.

The lochia, though diminished in quantity, were normal in character until the fifth day after delivery, when patient and nurse complained that they were offensive. This I believed to be an exaggeration, as I could detect no odor in the room other than a heavy perfume of white rose, which they persisted in using, contrary to my wishes. Although believing that a serious odor could not be covered by a perfume, I ordered the addition of carbolic acid to the vaginal injections which were being given twice daily, and had the number of injections increased to four a day.

The temperature still kept up to 100°, and that fact, as well as the odor of the lochia, caused me some uneasiness; still, I refrained from making a vaginal examination, lest I should interfere with a possible union of the lacerated cervix.

Three days later, the eighth after confinement, as the patient was not improving, I made a digital examination; found the os closed and slight uterine tenderness. The examination gave no pain at the time, but it was followed by soreness during the next twenty-four hours.

There was no continuous vaginal discharge, but an occasional copious flow of fetid pus. A thorough syringing, with free ventilation, restored everything, apparently, to good order. Hence my failure to detect the odor for several days. I decided to expose the os uteri through a speculum, and then explore the uterine cavity. I found the cervix looking healthy, the laceration united on its inner margin, the external or vaginal surface granulating, bleeding when touched. Fearing I should rupture the united portion, I very cautiously passed a small piece of cotton, on the dressing-forceps, saturated with tinct. iodine, into the uterine cavity. Instantly, out gushed about half an ounce of fetid pus into the speculum. Removing this with absorbent cotton, I passed a fresh piece of cotton into the cavity, which was followed by as much more thin watery pus, the first being thicker. Carefully removing this, I again made a free application of tinct. iodine to the uterine cavity, which now appeared to be clean. After this, I irrigated the cavity once daily with a weak solution of iodine, using a quart of warm water and about one drachm of tinct. iodine.

I found pus in decreasing amount each day, until, on the sixth day from the institution of this treatment, the uterine cavity was found clean. During this treatment, there was uterine tenderness, but no abdominal distension or general soreness. The patient improved in general appearance and appetite, the pulse and temperature sank to normal in about three weeks, and a normal state of health was regained.

This condition of the endometrium may have started from the laceration of the cervix, or the uterine tissues may have been injured by the forceps during delivery.

Mary Willits, M.D.,
1527 Green Street. *Reporting Secretary.*

Special Correspondence.

MEDICAL JOTTINGS FROM THE OCCIDENT.

On Board Steamship Mariposa.

I was fortunate in finding, on board the vessel, Dr. Brodie, of Honolulu, on his way home to the islands after a brief visit to the States. He came out from Montreal about eight years ago, and has become very successful in the Hawaiian Islands. Besides a large private practice, he is surgeon to the Queen's Hospital, and port physician of Honolulu. The hospital is partly endowed. The kingdom allows $6000 a year, and a tax of two dollars on all who intend to stop any time in the kingdom is applied to the hospital fund. Shortly before the steamer arrives at port, the purser goes the rounds, giving Honolulu passengers a passport, and collecting the two dollars.

Placed just within the north tropic zone, latitude 21° 18′ N., the islands enjoy a

climate at once moderately warm and wonderfully equable, the thermometer never going higher than 90°, never less than 60°. Being within the trade-wind belt, the group is favored by pleasant breezes for the greater part of the year. Dr. Brodie says bronchial and digestive troubles are what he is chiefly required to treat. Eruptive fevers are seldom met: ten years since any measles; eight years since a case of small-pox. Honolulu has about 22,000 people; probably twelve physicians One-half of the population employs so-called native physicians, who do not give medicine, unless some native herbs, but depend on prayers and pow-wows for healing-powers. By law, the natives are admitted free to the hospital, if they desire to enter; all others must pay from 60 cents to $2.50 a day, the highest price being for private rooms.

Erysipelas after operations is scarcely known. Antiseptic surgery is not practiced beyond ordinary cleanliness. The natives recover after most horrible wounds or terrible operations—they suffer no more from shock than the ordinary animals of the field. Dr. Brodie said a young native was disemboweled by a bull; the bowels were washed in a bucket of water, replaced, abdomen sewed, and, contrary to his expectations, the boy made a rapid and perfect recovery.

The medical fees are $2.50 a visit in town; $1.00 office-visit, supplying the medicine. The average fee is below what is obtained on the American coast.

Our ship surgeon is Dr. Giberson, a graduate of Jefferson Medical College, in 1876. He is a member of the California State Medical Society, and a gifted writer upon medical jurisprudence.

A son of the late Prof. Trousseau, of Paris, is a practitioner in Honolulu, and enjoys, with Dr. Brodie, the cream of the practice there. Almost all the islands of the group have resident doctors. Dr. Campbell, Dr. Craddock, and Dr. Smith are on Kanai; Dr. Herbert on Mani; two or three on Hawaii. If any of the readers desire information of any kind concerning the Hawaiian Islands, Dr. Brodie, of Honolulu, will be pleased to correspond with such. The death-rate among the whites in Honolulu is 6 or 8 per 1000; among the natives, 30 to 40. They are rapidly dying off.

C. C. Vanderbeck, M.D.

—Dr. Samuel Myers, of Newville, Penna., died August 16. He was 60 years old.

Periscope.

Œsophagotomy for the Removal of a Tooth-brush.

At the meeting of the New York Surgical Society, May 23, 1888, Dr. Lewis J. Stimson presented a bone-handled tooth-brush, six inches and three-quarters long, which he had removed by œsophagotomy. The patient was a spare man, forty-eight years old, who had been under restraint for a few weeks because of mental depression, and who in a moment of suicidal aberration had swallowed the tooth-brush, bristle-end first. The swallowing had been done so quietly and had caused so little inconvenience that the attendant had not been aware of it until informed by the patient two hours later. Dr. Stimson saw him ten hours later, and could touch the upper end of the brush with a sound at a point about seven inches beyond the incisor teeth, say one inch below the cricoid cartilage. The patient had entirely recovered from the suicidal impulse, was anxious to be relieved, and bore the explorations with much fortitude and calmness. Palpation of the neck gave a little pain, but the presence of the brush could not be thus detected. After a few cautious unsuccessful attempts to catch the handle with œsophageal forceps, ether was given and œsophagotomy done upon the left side, the œsophagus being reached below the thyroid gland. A longitudinal incision large enough to admit the finger was made in the œsophagus, and through it the handle of the brush could be felt lying with its breadth in the mesial plane; it was easily caught with an artery forceps and drawn out. The only vessels that required to be tied were two that had been divided in incising the skin. The opening in the œsophagus was closed with a short continuous catgut suture and a single additional stitch at the upper end, where it was noticed that air escaped in coughing. These sutures included the mucous and muscular coats; a second row of interrupted sutures was placed in the fibrous outer sheath, with the hope of thereby permanently shutting off the deep ones from the rest of the wound. The external wound was closed with catgut and silkworm-gut sutures about a large split drainage-tube, which reached to the immediate neighborhood of the incision in the œsophagus. The patient was fed with milk in small quantities at a time, about three pints daily, with an occasional milk-punch. He complained only of a sore throat for a

few days, and at no time did he have any fever. The dressing was changed on the fourth day; there was a slight discharge, decidedly offensive in odor, and the wound was gently syringed with a bichloride solution. On the sixth day the discharge was still scanty and almost free from odor. On the night of the seventh day, during a fit of coughing, the patient felt air pass out through the wound, and on the following day the dressing became quite wet with the milk which he swallowed. He was then fed twice a day through an œsophageal tube, but was allowed to drink a little water when he wished it. Occasionally he would feel the milk regurgitate from the stomach and escape in very small quantities through the wound. This happened for the last time on the eleventh day, and air escaped for the last time on the morning of the twelfth day. On that day he drank a glass of water in Dr. Stimson's presence without feeling it in the wound, and, as cool water syringed into the wound could not be felt in the œsophagus, it was thought that the opening was sufficiently closed to justify shortening of the drainage-tube. On the fourteenth day it was again shortened, and on the sixteenth day it was entirely removed. On the day of the meeting, the seventeenth day, there remained only a shallow opening in the skin.—*New York Med. Journal*, June 30, 1888.

Bursa Pastoris.

In a recent number of the *Deutsche Medizinal-Zeitung*, Dr. Von Ehrenwall, of Ahrweiler, records the results of his investigations into the virtues of bursa pastoris, or shepherd's-purse, as an hæmostatic agent. This common plant, during the fifteenth, sixteenth, and seventeenth centuries, was much prized among the country people in many parts of Germany on account of its supposed power of arresting hemorrhage. It was first brought accidentally under his notice about four years ago while treating a case of menorrhagia that defied all the means employed. A neighbor of the patient advised an infusion made of the common shepherd's-purse, and he accordingly had some of the weed collected and a strong infusion made and given to the patient, whereupon the bleeding ceased immediately after the first cupful. Since then he has repeatedly used it in all forms of hemorrhage, and with such marked success that he considers it the most reliable of all our hæmostatic remedies. He found that the infusion of the dried plant was inert. The fresh plant is the best, in the strength of half a handful of the upper half of the plant to two teacupfuls of infusion. The patient is to take two teacupfuls of the cooled infusion morning and mid-day. If the second dose were given too soon, difficulty of breathing, headache, and vomiting resulted. A pharmacist, Herr Bombelon, of Bael Neuenahr, at his request prepared a fluid extract, a teaspoonful of which, taken three times a day, produces the effect of four teacupfuls of the infusion. The efficacy is said to be due to an acid—bursuric acid—the presence of which in the plant has been determined. The alkaline salts are said to possess the same styptic properties. As these salts are very soluble, he proposes to test them by way of subcutaneous injection, and to report on their action at a subsequent occasion.—*Medical Press and Circular*, June 23, 1888.

Variolous Periostitis.

At the meeting of the Société Médicale des Hôpitaux, of Paris, May 25, 1888, M. Barie read a communication upon variolous periostitis; the following are the conclusions which he reached: 1. Periostitis should take its place among the numerous complications of variola; but, if one may judge by the rarity of published cases, it seems infrequent. 2. It arises during convalescence from variola, generally from the fourth to the sixth week, and appears preferably in adolescents, or young adults who have not yet completed their growth. 3. It may be limited to a single bone, or invade several non-contiguous points of the skeleton. 4. Variolous periostitis occupies the long bones generally at the point of junction of the diaphysis with the apophysis; it has a marked predilection for the bones of the lower limbs, and especially for the tibia. 5. The disease is characterized by a spontaneous pain, more or less acute, increased by pressure and motion; and by a marked swelling of the affected region, in which deep puffiness in immediate connection with the subjacent bone can be detected. The skin preserves its usual aspect and its normal color. 6. The affection is without fever, and terminates by resolution in a space of time varying from about two to six weeks. It may leave behind it more or less persistent periostosis. Relapses are not at all rare. 7. The treatment of the disease is very simple. The affected limb is to be put at rest, enveloped in emollient poultices; in other cases, blisters or some resolving plasters may be employed. These measures suffice to ensure recovery. 8. The disease

is due directly to the infectious agent which causes all the other clinical manifestations of variola; it is occasioned by fatigue which necessarily accompanies the first steps, by walking, or simply by the erect posture. 9. The characteristics which have just been enumerated belong to what may be called the subacute or still benign form of the disease. Analogy with the infectious periostitis occurring in other diseases, as typhoid fever, permits one to suppose that there also exists a grave form terminating often by suppuration with osteitis, necrosis, and even osteo-myelitis.—*Bulletin Médical*, May 27, 1888.

Tension, as met with in Surgical Practice.

In his first lecture (*Lancet*, June 23, 1888) before the Royal College of Surgeons of England, Thomas Bryant, Hunterian Professor of Surgery and Pathology in the Royal College of Surgeons, said that the word "tension," as employed in surgical work, and especially in clinical work, most frequently means the pressure brought about by the stretching or distension of tissue from either the growth of some neoplasm or the effusion of some fluid. In this sense, it means the distension or stretching of parts by a force acting from within—by centrifugal pressure, as it may be rightly termed. But it is, he says, applied in another way; that is, to the stretching of tissues which have been divided and brought together by sutures, the strain upon the sutures from the elasticity of tissues being the measure of the tension.

The effects of tension will, he says, be found to vary according to the nature of the tissue subjected to its influence. In one of an elastic kind, which yields readily under distension, the effects of tension are neither much felt nor well displayed, unless the expanding or distending force is carried to its full extent; whereas, in a tissue which is unyielding and inelastic, the mildest distending force is resented, and the effects of tension are forcibly demonstrated. Again, when the distending or stretching medium acts *rapidly*, the tension brought about in the tissues is severe, the symptoms associated with it are serious, and its effects destructive. On the other hand, when the distending, stretching, or straining medium acts *slowly*, tension is seen acting at a lower level, its symptoms are modified in intensity, and its effects qualified. As a general rule, the severity of the effects of tension, as well as the severity of the symptoms which characterizes its different degrees, is found to turn upon the acuteness of its action and the elasticity of the tissues implicated. To this rule, however, there are exceptions.

The *ultimate* effects of tension upon any tissue turn then, he says, upon the elasticity of the tissue and the rapidity with which the tension has been brought about; but they are invariably destructive. Its *immediate* effects are primarily upon the circulation, especially the venous; and the pressure from within of necessity tends to bring about first a slowing of the capillary blood-current through the stretched parts, and, later on, its stagnation, from which the death of tissue follows.

The one subjective symptom of tension is pain, which is always found to vary with the degree of tension to which the tissues are exposed, and the quality and quantity of the nerve-supply to the part.

As to the diagnosis of tension, he says that in superficial structures it may, as a rule, be readily estimated by palpation. In deeper parts, this may be difficult; in bone or in the cranial cavities, it is impossible. The aspect of a tense tissue helps diagnosis; its palpable enlargement as compared with the opposite and unaffected part, and its stretched appearance, being suggestive. In such a joint as the knee, this condition can be well observed. But when the tense tissue is well covered with soft parts, as in a femur the seat of periostitis, this observation cannot be made; but even there the enlargement of the part, and the engorged veins visible upon its cutaneous surface, are of diagnostic value as indicative of deep pressure.

Mr. Bryant reports a number of interesting cases which illustrate the various ways in which tension may occur, and their diagnosis and proper treatment.

He concludes his second lecture (*Lancet*, June 30, 1888) with the following propositions: 1. The pain associated with every form of inflammation of the bone or of its periosteal covering is due to tension, and the severity of the pain is a fair measure of its intensity. 2. In acute inflammation of the bone or of its periosteum, tension is the chief cause of necrosis; and, in the subacute and chronic forms, it is a potent cause of their chronicity as well as of the destructive changes which, as a rule, follow. 3. The relief of tension, wherever met with, when the result of inflammation, is an important principle of practice which should always be followed. In bone, the principle is most imperative, on account of the difficulties

under which natural processes act in that direction, by reason of the absence of elasticity or yielding in bone, and by reason of the anatomical arrangements of its vessels, which favor blood-stasis. 4. To relieve tension in the softer tissues of the body, the local application of leeches, local or general venesection, acupuncture, aspiration, punctures, and incisions may be requisite; whereas, to carry out the same practice in endostitis or periostitis, subcutaneous or open incisions down to the bone, and the drilling, trephining, or laying open of bone by a saw, may be required, the choice of method having to be determined by the requirements of the individual case. 5. In the early or hyperæmic stage of inflammation of bone, before destructive changes have taken place, experience seems clearly to indicate that the relief of tension—as indicated by a dull aching pain, etc.—by means of drilling or trephining into bone, may arrest the progress of the disease and help toward a cure by resolution; whereas, in the exceptional cases in which this good result does not take place, suffering is saved and destructive changes are limited. 6. In articular ostitis of every kind and variety and in every stage, this mode of treatment cannot be too strongly advocated, as tending toward the prevention of joint-disease. 7. In acute or chronic abscess of bone, diaphysial or epiphysial, the abscess-cavity must be opened as any other of the soft parts, drained, and dressed in the most appropriate way—the principles of treatment being the same in hard or soft tissues, although they are modified by the anatomical conditions of the parts.

Displacement of the Semilunar Cartilages of the Knee-joint.

Dr. W. J. Rothwell, in a communication to the *Denver Medical Times*, July, 1888, gives the following symptoms and treatment of this affection: The symptoms of this luxation come on suddenly, and are well marked. The pain is severe, often excruciating. The limb cannot be extended, but is held semiflexed. The only condition with which the injury can possibly be confounded is that described under the head of movable bodies or floating cartilages within the knee-joint. Here the analogy is so close as to demand the exercise of our best powers of discrimination. In the suddenness of its occurrence, the atrocity of the pain, the inability to move the limb, the conditions correspond very closely. The strongest differential points are: 1. Displacement of the semilunar fibro-cartilages —especially for the first time—requires a considerable degree of violence, while movable bodies within the joint may at any moment produce the most painful sensations without any assignable reason. 2. Movable bodies within the joints must be preceded by a history of synovitis or other disease, which caused the deposit of fibrinous or cartilaginous material of which they are formed; no such history is a necessary antecedent of semilunar displacement. 3. Although a movable body is somewhat difficult to detect and isolate—from which characteristic the Germans call it *ein Galenkmaus*, or a joint mouse—yet it is seldom that it can elude the skilful search of the surgeon. 4. The painful point in semilunar displacement is on the inner surface of the knee, along the border of the inner cartilage, while in movable bodies the location of this point is variable.

Reduction of this displacement is performed by extreme flexion of the knee, thus liberating the imprisoned cartilages, and then rapidly extending the limb. The most important point in the after-treatment is rest, to favor union of the torn coronary ligament. If this precaution is not observed, and the rent remains, the knee-joint is greatly weakened and the displacement is likely to occur again and again. I know of two cases in which complete recovery followed a pretty sharp attack of inflammation of the knee. The enforced rest of the limb and the exudation of plastic material during the inflammatory attack must have healed the breach in the torn tissue. For those cases in which there has been a frequent recurrence of the trouble, if it can be ascertained that it is due to relaxation of ligaments, massage or electricity is beneficial, in fact curative. For those cases of frequent displacement dependent on an unhealed ligament, flannel bandages and various forms of knee-caps are recommended. I have used them with some misgiving, lest they should do more harm than good. The results have never been satisfactory.

—At the Convention of Executive Health Officers of Ontario, at Lindsay, August 14, papers were read by Dr. Coventry, of Toronto; Dr. Yeomans, of Mount Forest; and Dr. Charles N. Hewitt, of Minnesota. The last paper was on "Practical Suggestions on International and Interstate Co-operation for the Prevention of Disease and for Stamping out Epidemics."

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ETIOLOGY OF SUMMER DIARRHŒAS IN INFANTS.

The etiology and prophylaxis of the summer diarrhœas of infants are subjects of the greatest importance, not only to the physician, but also to the sociologist. The truth of this statement becomes apparent when we recall the fact that one-fourth of the human race dies before reaching the age of two years, and that a large percentage of these deaths is due to diarrhœa. Recent investigations, with reference to the causes of summer diarrhœas of infants, have been limited practically to a study of the effects of high heat and of micro-organisms. The antiquity of the term "summer complaint" shows that the conception of the relation between high temperature and diarrhœa is by no means new. It is not so much the fact, as the *modus operandi* by which summer temperature causes diarrhœa, that has received attention.

Since diarrhœas are far more prevalent among infants reared in cities than among those in the country, heat has been recognized as a predisposing or mediate, rather than as a direct, cause of diarrhœa; and since diarrhœas are most common among the children of the poor, living in the slums, alleys, and tenement houses, where filth abounds, it has been considered that high temperature acts by favoring the fermentation and decomposition of organic matter, thus loading the atmosphere with noisome vapors, which, in turn, depress the vitality of those inhaling them, or actually produce the disorders in question. Likewise, high temperature was supposed to act by causing fermentation and decomposition of milk and other foods ingested by infants. When these views were promulgated, fermentation and decomposition were considered to be purely chemical processes. At the present time, these facts are regarded as supporting the theory that micro-organisms play an important *rôle* in the causation of diarrhœas.

It has been a prevalent belief that a direct ratio exists between the range of the maximum daily temperature and the prevalence of diarrhœa, including cholera infantum. According to Seibert, of New York, this ratio exists with the minimum, rather than the maximum, daily range of temperature. This view appears paradoxical, but, upon examination, its truth becomes manifest. If a certain temperature be necessary for the development of an epidemic of summer diarrhœa, it is evident that a ratio will exist between the number of hours in the day during which the temperature is at or above this point, and the number of cases of diarrhœa; and that the epidemic will be greatest when the temperature is continuously above this point throughout the twenty-four hours. With a minimum daily temperature of at least 60° F., diarrhœas will largely prevail; and it is well known that this or a higher

temperature favors the activity of micro-organisms. Thus, from whatever standpoint the subject is viewed, the agency of high temperature in the production of diarrhœa seems to be that of affording one of the conditions favorable to the development of germs. Perhaps we may instance, as an exception, the depressed tone of the nerve-centres and tissues, brought about by high heat, which would itself act as a predisposing cause of diarrhœal or other disease.

The drift of opinion, recently, has been strongly toward the view that micro-organisms sustain a direct etiological relation to the summer diarrhœas of infants. The differences in the chemical composition of artificial foods and woman's milk, together with the relative indigestibility of the casein of cow's milk, have been considered the correct explanation of the greater liability to diarrhœa of artificially-fed infants. Unfortunately this view, which may be called the chemical theory, does not explain why artificial food agrees with infants in winter, and yet causes diarrhœa in summer. The researches of Escherich, Uffelmann, and Forster go far to show that our views as to the relative indigestibility of the casein from cow's milk have been exaggerated. However, we are not prepared to go so far as Escherich, who claims that cow's milk is not more difficult of digestion in the normally-developed infant than woman's milk. Still, these investigations, and the fact that artificial food agrees with infants in winter, and yet causes diarrhœa in summer, show that the cause of summer diarrhœas is to be sought elsewhere than in the chemical composition of the food. Clinical observation has shown that insanitary surroundings, artificial feeding, and excessive heat act in unison in the production of summer diarrhœa. The advocates of the germ theory claim that these facts receive their best explanation in the action of micro-organisms of fermentation, putrefaction, and those causing the development of ptomaines, and point out that the conditions named are those which favor a rapid multiplication of low forms of life.

We by no means believe that all diarrhœas in infants are caused by germs; but we feel convinced that efforts to provide infants with food and drink free from pathogenic and non-pathogenic organisms will result in greatly lessening the mortality of infants from diarrhœa.

EDITORIAL LABORS.

When the heats of summer fill the air, the Editor feels the oppression with his fellow-men, and is sometimes tempted to relax the diligence with which he performs his labors during the more genial or stimulating seasons of the year. This is when he is apt to put old society reports, or well-preserved clinical lectures, or stale abstracts before his readers, in the hope that they will be too conscious of the effect of the heat to attribute their weariness to what they are reading; while even the editorial columns exhibit languor, and look thin and lean, and other symptoms of summer-complaint appear in them.

These reflections have arisen in our mind while turning over the leaves of some of our contemporaries, and we have so much appreciated the hardship of having to work when everyone wishes to take his ease, that we have felt a sincere sympathy for our fellow-workers.

But here comes along a contemporary whose editor seems to have one side which does not feel the heat. As we came at him in the editorial pages, his aspect seemed meagre enough to justify a fear that marasmus was impending; but, when we turned to those pages devoted to cultivating the favor of his advertisers, all was hearty and jolly. Here was no apathy, no dulness. Our keenest solicitude was excited when we found less than two columns of editorial devoted to his readers; but we thought he might pull through when we found more than five columns testifying to the interest he takes in cultivating his advertisers! These

manifestations of unilateral vitality excited our interest to such an extent that we studied his case systematically, and we discovered that, however cataleptic he appeared on the side turned toward his readers, there was no mistaking the functional activity of the side presented to his advertising patrons. So far as we went, not a single one of these lacked evidences of his consciousness and power of recognition. Hardly an instrument was advertised, but he had used it with success; and hardly a remedy, but he knew from experience that it was of great value. Seriously or with flashing wit, he bestowed upon each a puff, and he even intimated that he meant to use a number of them on his own proper person! How deceptive, we thought, are appearances; here is at least half a cerebrum which no summer heat can dull, and half a mortal frame which no weariness can exhaust. And think of the results of even such one-sided cerebration! An editor like this must surely be regarded as a model by the advertisers, and it may indeed be that those who subscribe for his journal will forget the aridity of the part ostensibly devoted to them, while they browse about in the advertising-pages with a relish which comes of getting what one did not bargain for. Suppose some of them are led to appropriate a too varied diet, and afterward feel some regret—what of that? Will they thereafter eschew such tempting fare? Or can it be that this editor knows his readers' tastes, and has no fear that they will object to being tempted so and so misled?

Are those editors, after all, wrong, who take the work of editing seriously, and strive constantly to give their pages scientific value, letting the advertisers take care of themselves? Shall those who use their best efforts to elevate the tone of medical journalism prove to be less wise in their generation than those who introduce or cultivate the arts of the auctioneer?

Time will tell! but the medical men and women of this country will be responsible for the result. They will get what they really want. If they wish solid scientific work, they will get it; if they want ill-disguised advertising-mediums, they can get all they want even now; and, with such examples before us, we need not fear that the supply will run out.

PILOCARPINE.

Jaborandi and its principal alkaloid, pilocarpine, although comparatively new remedies, have come into extensive use. Perhaps pilocarpine is most relied upon in the treatment of uræmia and uræmic convulsions. It has been equally lauded in the treatment of puerperal eclampsia of supposed renal origin.

Our object in calling attention to the drug is to emphasize a certain danger which may result from its use. Most systematic writers on materia medica mention that it causes an increase of the bronchial secretion; but the subject is cursorily treated, and little stress is laid upon the fact that this secretion may become greatly augmented and cause a dangerous bronchorrhœa. Unfortunately, this fact is only too well known to clinicians. In a case of puerperal convulsions in a primipara, which occurred recently in this city, there was complete and persistent anuria. After the failure of various other measures of treatment, one-twelfth grain muriate of pilocarpine was injected hypodermically. The secretion of sweat was scarcely at all increased, but, within a few minutes, profuse bronchial and salivary secretion began and continued until the patient died. Two somewhat similar cases have come to our knowledge. One was a case of uræmic convulsions in a man. One-twelfth grain muriate of pilocarpine was injected hypodermically, with the result that within a few minutes profuse bronchorrhœa was induced, which lasted until the patient's death. The other was a case of atropia-poisoning. The patient had been treated in the usual way, but without special good

effects. The same amount of pilocarpine was injected as in the other cases, with the same result. It is not urged that pilocarpine was the cause of death in any of these cases, for, so far as human judgment could tell, they were fatal cases; but the bronchorrhœa induced by the pilocarpine certainly hastened the fatal termination. It must be remembered that only one-twelfth grain of pilocarpine was used in each of the cases, while it is common to inject one-eighth or even one-fourth grain. In view of this well-recognized danger, we think that pilocarpine should be used with caution, and that the initial dose for hypodermic administration should not exceed one-sixteenth grain. Should bronchorrhœa be induced, the best antidote is atropia.

THE FAMILY DOCTOR SOCIETY.

It is reported that a society bearing this name is being organized in Philadelphia, its object being to enable persons of limited means to secure medical attendance at a very low price; indeed, it is stated that the payment into its treasury of fifty cents a month will entitle a whole family to the services of a physician. This society seems to be organized somewhat on the basis of similar societies in London, which have been the occasion of considerable difficulty between the struggling members of the medical profession there and those who were more firmly established. It has been repeatedly asserted that these societies are simply used as means of advertising the medical men who give their services through them, and that, on the pretence of supplying medical services at a price much below what it is generally believed such services could be honorably rendered for, the medical officers of these societies manage to secure to themselves a variety of extra charges and perquisites, which compensate them for their trouble. Of course, it is possible that a society could be organized to furnish medical services to the worthy and self-respecting poor at a moderate figure, and that it could be conducted upon thoroughly sensible and truly charitable principles; but we seriously doubt that this result has ever been actually attained, and are inclined to share the opinion of those who look upon efforts ostensibly made to secure this object, with a good deal of suspicion, and fear that they will do more to degrade the standing of the medical profession than they will to improve the condition of the poor.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

LECTURES ON DISEASES OF THE HEART, DELIVERED AT THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK. By Alonzo Clark, M.D., LL.D., Emeritus Professor of the Principles and Practice of Medicine, etc. 8vo, pp. 251. New York: E. B. Treat, 1887. Price, $2.75.

It is four years since these lectures were published by the late Dr. Clark, and it is a good thing to have them republished in the series of "Treat's Medical Classics," with the hope of securing for them a wider circulation. It is hardly necessary to say anything of their scientific value; for the reputation of the author as an able diagnostician and successful practitioner is familiar to most American readers. It may be said, however, that his lectures are written in an interesting and attractive style, and that, while they have not the conciseness looked for in systematic treatises, they have the charm of easy and colloquial expression, which is one of the best features of good clinical lectures.

One attractive thing in this book is the fact that it is quite American. The writings of foreign authors are cited, it is true; but most of the references are to the work of physicians of our own country, and full justice is done them.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF THE DISEASES OF WOMEN. By Graily Hewitt, M.D., F.R.C.P., Professor of Midwifery and Diseases of Women, University College, etc., New American, from the fourth London, edition, with 236 illustrations. Edited, with notes and additions, by H. Marion-Sims, M.D., New York. Three volumes, 8vo. New York: E. B. Treat, 1887. Price, each volume, $2.75.

This book belongs to a class of which we have never entertained a very high opinion They are published apparently chiefly to secure a wide distribution and to carry off a great many volumes on the strength of the names of the authors, without a due regard for the demands of good writing or good book-making. The authors of the volumes before us are well known—at least one of them is; but we do not think the reputation of either will be much enhanced by this production. It is true that it contains a good deal which is interesting and instructive; but in the whole work there is too much of an appearance of an effort, on the part of the authors as well as of the publishers, to make a big book of it, and to work the

subject over as much as possible. This fact makes a bad impression on us; and this is heightened by the wretched manner in which the book is illustrated and printed On the whole, we think our readers can spend $8.25 to better advantage than in buying these three volumes.

INTUBATION OF THE LARYNX. By F. E. Waxham, M.D., Professor of Otology, Rhinology, and Laryngology, College of Physicians and Surgeons of Chicago, etc. 8vo, pp 110. Chicago, Ill.: Charles Truax, 1888. Price, $1.25.

This handsome book contains a full and clear description of the operation of intubation, and a good outline of its history. The description is accompanied with illustrations which leave nothing to be desired. To carry out the operation requires, of course, a certain degree of manual dexterity; but any physician who has the necessary skill in using his hands ought to be able to do intubation after carefully studying Dr. Waxham's instructions.

As is well known, Dr. Waxham has preached and advocated intubation in the treatment of membranous laryngitis even more ardently than Dr. O'Dwyer, who introduced the method. He thinks it preferable to tracheotomy, and seems to be justified in doing so by his personal experience and the statistics which he has collected. His argument is interesting and very persuasive, and we can heartily recommend his book to our readers, and congratulate him upon its admirable character, and his publisher upon the handsome way in which he has brought it out.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

Inguino-properitoneal Hernia. By Wm. Stone Torrey, M.D., Brooklyn, N. Y. From the *Annals of Surgery*, March, 1888. 10 pages.

Hernia Inguino-properitonealis, with an Account of a Case. By Charles W. Dulles, M.D., Philadelphia. From the *Medical News*, January 22, 1887.

The Neural and Psycho-neural Factor in Gynæciac Disease. By C. H. Hughes, M.D., St. Louis. From *The Alienist and Neurologist*, April, 1888. 16 pages.

On the Nomenclature and Classification of Diseases of the Skin. By L. Duncan Bulkley, A.M., M.D., New York. From the *Archives of Dermatology*, October, 1881.

Hysterorrhaphy. By Howard A. Kelly, M.D., Philadelphia. From the *Amer. Jour. of the Med. Sciences*, May, 1888.

Papillomatous Cystic Tumor of Ovary, with Hernial Pouch Developed in the Cicatrix of the Abdominal Wound from a Former Ovariotomy. By L. H. Laidley, M.D., St. Louis. From the *Journal of the Amer. Med. Association*, April 14, 1888.

The Intra-Uterine Stem in the Treatment of Flexions. By A. Reeves Jackson, A.M., M.D., Chicago. From the *Gynecological Transactions*, 1887.

The Heat-Centres of the Cortex Cerebri and Pons Varolii. By Isaac Ott, M.D., Easton, Pa. From the *Journal of Nervous and Mental Disease*, February, 1888. 20 pages.

—Dr. Torrey gives an account of a case of properitoneal hernia in which he operated by opening the hernial sac over the inguinal canal and over the abdominal swelling. His patient seemed to be in a fair way to recover, when, on the third day, he got up on the chamber to have a stool, and died in a few hours, of heart-failure. The case is an interesting one, and Dr. Torrey's paper deserves attention, especially as the writings on the subject in the English language are very few. In this country, only three operations for properitoneal hernia have been reported—one by Dr. Dulles, of Philadelphia; one by Dr. Hartley, of New York; and this one by Dr. Torrey. Dr. Dulles's patient died from unrelieved strangulation, Dr. Hartley's patient recovered, and Dr. Torrey's case ended in death, from no fault of the operator. The experience of these operators seems to justify the opinion that laparotomy is to be preferred to herniotomy in the treatment of cases of this sort; but this cannot be established until a larger number of cases have been reported, and especially a larger number of laparotomies.

—Our object in calling attention to the paper on inguino-properitoneal hernia by the editor of the Reporter, in connection with that by Dr. Torrey, is to inform our readers that a copy of it will be sent to anyone who wishes, on application. It was written with the hope of diffusing information in regard to a form of hernia which is by no means very uncommon, but which is rarely recognized; and we trust that this allusion to it will not be regarded as improper, in view of the writer's belief that unrecognized cases of properitoneal hernia usually terminate fatally, while those which are recognized before operation are quite amenable to surgical treatment.

—Dr. Hughes's pamphlet contains a paper read at the Ninth International Medical Congress, in which he argues for the importance of properly estimating the influence of the nervous system in producing morbid symptoms or morbid conditions in the pelvic organs of women. Beside this, it contains a timely appeal to physicians to remember that all diseased states, however local apparently, should be studied with a due appreciation of the general state of the patient, and of what may be going on in remote parts of the organism. As a neurologist discussing a gynecological subject, Dr. Hughes says many things which might be pondered over with advantage by medical men following both of these specialties, as well as by all practicing physicians.

—This somewhat belated pamphlet of Dr. Bulkley's comes to our table for notice at a time when even the name of the publication in which it first appeared has given place to another. Still, the pamphlet is interesting, as marking one of the steps by which dermatology has come to have one of the most comprehensive and exact nomenclatures in all the round of the medical specialties.

—Dr. Kelly, in this pamphlet, advocates the practice of stitching the fundus of the uterus to the abdominal wall in certain cases of intractable retroversion or retroflexion, and fortifies his position with the histories of a number of cases operated on by European surgeons, and reference to an operation of his own, the details of which he promises to give in a later publication. He also describes the method of operating, and illustrates it with three good woodcuts.

—Dr. Laidley's case is a very interesting one, and illustrates a number of important points in connection with abdominal surgery. In some regards, it teaches

what should be done, and in some it indicates what ought not to be done. As an operation, Dr. Laidley's work was entirely successful, as he freed his patient from an ovarian tumor, healed a fistula, and cured an abdominal hernia.

—Dr. Jackson, in this paper, proposes a method of using stem pessaries which has many theoretical advantages, and which seems to have proved both safe and efficient in his hands. It consists, essentially, in using flexible rubber stem—not a hard vulcanite one—beginning with a small size and gradually advancing to larger ones, and only after a period of some months coming to a full-sized and inflexible instrument. The good results he has observed after employing this method lead him to oppose the opinions of those gynecologists who regard the stem pessary as ineffectual and unsafe. The latter may, however, find ground for a rejoinder in Dr. Jackson's statement that in fifty-two of the sixty-seven cases he reports, the patients had anteflexion, as against only fifteen with retroflexion.

—Dr. Ott's paper contains another of those carefully-prepared contributions to our knowledge of experimental pathology—and indirectly to physiology—for which he is already so well known. By injuring or removing a portion of the brain in cats, at the points regarded as presiding over heat-production, he found that a point at the juncture of the supra-Sylvian and post-Sylvian fissures had the highest thermic value, and injury of other parts of the brain, with the exception of the cruciate centres, had but little effect on the temperature. To understand the value of these experiments demands a careful study of Dr. Ott's paper, and we can do no more here than to call our readers' attention to it.

CORRESPONDENCE.

Strongulus Gigas.

TO THE EDITOR.

Sir: With your permission, I will report a case of "Strongulus Gigas" which came under my observation last fall. The subject is interesting because of the extreme rarity of cases and our lack of knowledge concerning this parasite. Even persons recognized as authority on diseases of the kidney seem never to have heard of the formation of worms within its substance.

The patient, Mr. R. E. Adams, 73 years old, had been gradually failing in health for one year. His symptoms were, for the most part, those of dyspepsia, with nothing pointing directly to renal trouble except some vague pains in the back. In September, 1887, he made a business trip to Nebraska, and while there, at the residence of his son, was seized with a severe attack of renal colic. No physician was called, but by the use of domestic remedies the attack subsided, and in a few days he passed from the bladder a half-dozen worms. He returned home, and, on October 21, came to consult me. He complained only of extreme weakness and fatigue on the least exertion. His appetite was poor, sleep moderately good; he did not feel sick. When he spoke of having passed worms, I requested that should any more make their appearance he would allow me to see them. In a few days he brought one to my office, the last and only one he passed after coming home. This one was about three inches in length, two lines in diameter, bearing some resemblance to the common earth-worm. He said the others were both longer and thicker, which statement was endorsed by his son, who had seen them. His urine I found to be highly albuminous. P. W. Lewellen, M.D., of Clarinda, President of our State Board of Health, very kindly made a microscopic examination of it for me, and reported that he found "no tube casts but some hyaline casts." After a few weeks' treatment, I frankly told him I could not do anything but palliate his trouble. He decided to try the virtues of the mineral springs at Burlington Junction, Mo. In about three weeks he returned home, a great deal weaker than he left. About this time his feet and hands began to swell, and this was followed by a general dropsy.

During all this time I was trying to learn something more about these parasites, but could find scarcely anything concerning them. Physicians with whom I would talk were as ignorant as myself, and some would even stare in surprise at the mention of it. I wrote to a friend, M. W. White, M.D., who was attending Bellevue College, and had him interview some of the professors on the subject, and here are the answers: One thought they were sometimes formed in the pelvis of the kidney, but knew nothing of the cause or pathology. This expressed my own opinion. Another had seen one case in which worms were passed from the bladder, but at the autopsy it was found that the patient had had typhlitis and local peritonitis. There was also inflammation of the vermiform appendix, with perforation at its lower end, and adhesions to the bladder, with perforation of it. Not only worms but other solid matter was passed by the urethra. He said the kidneys were not affected at all, and gave it as his opinion that worms of the size I mentioned were never formed in the kidney or urinary organs. He thought there must be some communication between the urinary and intestinal tracts. A third professor had never seen a case, but thought there must be adhesions and perforations of some portion of the urinary tract. Well, my patient died December 29, and, the

following day, assisted by Dr. W. T. Chambers, of Blanchard, Iowa, I made an autopsy.

We found the right kidney enlarged, weighing two and a half pounds, not a particle of healthy or normal tissue about it. In external appearance, it resembled a fatty kidney. We found no worms either in the kidney, ureter, or bladder; but, on section, we found unmistakable evidence of their habitation. About one-fourth the entire mass, including the pelvis and infundibula, presented the appearance of being eaten by worms; looked like a mass of dry curds. The left kidney was also affected in its superior border, and would probably have weighed one-half pound; but there were no indications that it had ever been invaded by the parasites. There were two or three points of similar deposit in the liver, but they were small. The heart was flabby and showed considerable muscular degeneration. The other viscera were in their normal condition. There was no evidence of any peritonitis, typhlitis, or any other "itis." Bladder and ureters were in a healthy condition, and *no abnormal adhesions anywhere* There was no communication between the alimentary and urinary tracts; consequently the worms came direct from the kidney. Through Dr. Lewellen, I sent a portion of the kidney to a Chicago pathologist for examination, but he was away from home at the time, and the examination was never made.

Hoping by this report to throw a small ray of light on a very dark subject, I am

Yours truly, M. R. George, M.D.

College Springs, Iowa,
June 20, 1888.

Wounds of the Palmar Arch.

To the Editor.

Sir: Having seen some recent articles in the Reporter in regard to wounds of the palmar arch, I thought it might be of interest to send the report of a recent case which came under my treatment. The patient was about to take the cap off a brass shot-gun shell, which had been snapped, but had missed fire, when it exploded, the sharp edges of the shell lacerating the hand severely, cutting the superficial palmar arch in such a manner as to cause profuse bleeding.

The treatment consisted in first ascertaining if there were any foreign substances lodged in the wound, then adjusting the parts, and applying subsulphate of iron on a wad of antiseptic cotton held in place with a bandage. Over this were placed two letter-bands, which made sufficient pressure to control the hemorrhage. I was sent for in a few hours, and found the patient complaining of a good deal of pain in the hand and arm. One letter-band was removed and the hand elevated. The suffering was then greatly relieved. On the second day, the bandages were removed, and, on the third day, the cotton was soaked loose, when there was a profuse sanguineous discharge, which gave great relief. The wound was then dressed with lanoline ointment, with moderate pressure. After this, there was rapid recovery.

I forgot to say that, in this case, there was a backward dislocation of the third phalanx of the middle finger.

Yours truly,

J. M. G. Beard, M.D.

Ambia, Ind.,
Aug. 4, 1888.

Hydrofluoric Acid in Phthisis.

To the Editor.

Sir: You would do me a great favor by instructing me how to use hydrofluoric acid in the treatment of phthisis, and where I can get the necessary apparatus for using it.

Yours truly,

Wm. Hoffbauer, M.D.

Guttenberg, Iowa,
Aug. 8, 1888.

[As our correspondent will see, by referring to the Note and Comment in the Reporter, May 19, 1888, p. 653, the method of using the acid is not as simple as one could wish. The atmosphere of a chamber, tent, or cabinet is saturated with the vapor of hydrofluoric acid, generated by passing a current of air through a solution of 9½ ounces of distilled water and ¾ of an ounce of hydrofluoric acid. This solution is contained in a tank made of gutta-percha. To obtain the beneficial results of these inhalations, the patient should sit for one hour a day in the atmosphere generated as above described. Doubtless any receptacle which would not be acted upon by the acid would answer as well as one of gutta-percha. Editor of Reporter.]

Carrying Nitro-glycerine.

To the Editor.

Sir: Is there any danger from explosion attendant upon carrying a one per cent. solution of nitro-glycerine in the pocket in traveling over the country, as I have to do in my practice? And is there any danger in keeping it on the shelf in the office, or in handling and dispensing it? And ought patients and others to be cautious when doing so? Will you please answer, if convenient, in Reporter?

I have only lately commenced using it

in my practice, having been deterred from doing so much earlier on account of the explosive character of the article, at least when not in dilute solution. From my limited experience with it so far, I have no doubt of its greatly beneficial effects in morbid states in which there is retarded circulation or local blood-stasis, as well as in certain forms of neurotic affections. Prof. H. C. Wood, in his last edition of U. S. Dispensatory, is not very explicit in regard to the non-explosive character of an alcoholic solution of nitro-glycerine, though he says that it is *claimed* that it is not explosive. Hence, I address myself to you as above, to obtain the information necessary to guard against danger, if there is any, from the source indicated.

Yours truly,

Halifax, Pa., H. W. Bishoff.
August 8, 1888.

[An alcoholic solution of nitro-glycerine, of a strength of ten per cent., is absolutely free from danger so far as explosion is concerned, and so, of course, must any weaker solution be. Editor of Reporter.]

Notes and Comments.

Treatment of the After-birth in Normal Labors.

Credé, of Leipzig, writes in the *Archiv für Gynäkologie*, Band 32, Heft 1, in answer to a discussion upon his method of treating the third stage of labor, which occurred at the Wiesbaden Congress of last year, and in which varied criticisms and modifications were suggested. He reminds his readers that, when he first advocated the method which commonly bears his name, there were but two procedures in vogue: that which consisted in removing the placenta with the hand, or an instrument introduced from without, and the expectant plan, which relied entirely upon nature. He comments upon the misstatements of his method which have been made, and considers the term "external method" as its most appropriate designation.

The most decided criticism made against Credé's exposition of his method is that he does not define clearly enough the time at which the placenta is to be delivered. He considers that the choice of the time for employing his treatment depends upon one of the three indications for terminating labor, which are as follows: terminating a dangerous condition already established; the prevention of accident; saving of time. Regarding the first, there can be no question that the patient must be rescued from her peril at once by bringing labor to a close. Regarding the second, Credé's experience has led him to believe that in the majority of normal labors, when the uterus contracts well and responds to massage promptly, that three or four after-pains suffice to expel the placenta in from fifteen to thirty minutes after the birth of the child. He does not, however, advise that labor be ended invariably in this time; he recognizes the fact that many circumstances may render the exercise of a more expectant course of action necessary. The saving of time and suffering he thinks well worthy of serious consideration, from the interests of attendants and patient alike, especially since the method of treatment advised exposes the patient to no added danger. He replies to the objection that greater loss of blood results from his treatment by stating that the loss of blood in a labor depends upon so many factors that it would be difficult to assert that any one is solely the cause; he is positive that the loss is not increased, but in his experience diminished, by his delivery of the placenta.

He also thinks that the retention of chorion and decidua is not more frequent among patients so treated; it occurs with about equal frequency, he says, with various methods of treating the third stage of labor. In four and one-fourth years, he has treated 4969 patients in the Leipzig clinic without a case of retention, death, or serious complications which could be ascribed to this treatment. The cause of puerperal accidents he believes to be the meddlesome practice of the accoucheur; for fragments of placenta and membranes, when left to nature and without infection conveyed by instruments, Credé believes to be innocuous. Auto-infection in such a case he considers impossible; the infecting material must come from without, and be absorbed by a recent wound, or an old wound recently freshened.

To the criticism that uterine massage, or "rubbing of the uterus," is unnecessary and dangerous, Credé replies that he does not advocate violence, but gentle patient massage and stroking of the uterus, which, when done by a practiced hand, cannot do harm. This method is not difficult to acquire, but is not a trivial procedure, or one to be performed without care and skill. A student should learn first to stroke gently the entire anterior surface of the uterus, then to straighten the uterus, and place it so that its direction (or axis) corresponds with that

of the sacrum and coccyx, and, finally, he should add pressure exerted upon the uterus. The last is intermitted during uterine contractions. It is usual in patients so treated to find the placenta lying in the vagina after a short time.

A substitute proposed for this treatment is pressure by the abdominal muscles, which evidently is poor reliance in a condition in which the tissues have been distended and weakened, and where the mother's strength is nearly spent by her labor. To the proposals to rub only the inferior segment of the uterus, and also to push it upward above the supposed site of the placenta, Credé replies that the most efficient muscle of the uterus is in the superior and not in the inferior segment, and hence the part most powerful to contract should be stimulated: if the uterus be strongly pushed up immediately after delivery, a laceration of the cervix may be made larger; it is unnecessary strongly to raise the uterus, for stimulation of any portion of the uterine muscle will result in the contraction of the whole. He does not believe that the placenta is separated by the formation of a blood-clot between the placenta and the uterine wall, but believes that the uterus expels the placenta by its contractions, as it does the child.

Credé feels justified in concluding that the method which he originated is correct in principle, and in practice is without objection. He has no reason as yet to alter his method; the improvements suggested by others are already possessed by his treatment, or they are unimportant. He believes that no occasion has been shown for adopting any of the modifications proposed.—*American Journal of the Medical Sciences*, June, 1888.

Round Perforating Ulcer of the Duodenum.

Dr. W. W. Johnston, in an article on Round Perforating Ulcer of the Duodenum, in the *American Journal of the Med. Sciences*, July, 1888, gives the following points in the differential diagnosis between gastric ulcer and duodenal ulcer:

GASTRIC ULCER.

1. Most common in women from twenty to thirty years of age.
2. Pain in epigastrium soon after eating.
3. Pain relieved by vomiting.
4. Vomiting of mucus, bile, and food—gastric indigestion.
5. Hæmatemesis common.
6. Hemorrhage from intestines rare.

DUODENAL ULCER.

1. Most common in men from thirty to forty years of age.
2. Pain in right hypochondrium two to four hours after eating.
3. Pain not relieved by vomiting.
4. Vomiting rare; no gastric indigestion.
5. Hæmatemesis rare.
6. Hemorrhage from intestines common.

One would be justified, he says, in making a diagnosis of duodenal ulcer if a man, otherwise in good health, between thirty and forty years of age, suffers with attacks of severe pain below the edge of the liver to the right of the median line, the pain coming on from two to four hours after eating, lasting for from one to four hours, and gradually lessening, to recur after the next meal, being most prolonged and most severe at night. Such a symptom, without gastric indigestion or the evidence of any organic lesion, pursuing a chronic course during a year or more, with remissions and exacerbations, being benefited by liquid diet and aggravated by indiscretions in diet, could reasonably be attributed to duodenal ulcer as a cause. This diagnosis would be confirmed by the occurrence of intestinal hemorrhage or by the sudden development of perforative peritonitis.

The Significance of Double Vision.

In the *St. Louis Med. and Surg. Journal*, July, 1888, Dr. A. D. Williams says that so long as the eyes move in harmony with each other we have single or natural vision. But let these harmonious movements be disarranged by excessive or deficient movement of either eye, double vision at once takes place. Diplopia, therefore, signifies that the eyes have ceased to harmonize perfectly in their movements. This results usually from defective action of one or more of the "motors" of the eyes, and consequently when we have double vision we must expect to find its cause in one or more of the recti muscles. The position of the images with respect to each other must determine which muscle is at fault. This is not always an easy task because of the complex nature of the associated movements of the eyes. It occasionally happens, though very rarely, that a person sees double with *one* eye. This can only occur from the defective sphericity of the cornea, congenital or acquired. In muscular diplopia, of course, the treatment must be directed to the correction of muscular action, from whatever cause it may arise.

Slag for Absorbing and Deodorizing Fecal Matter and Urine.

Amongst the many materials that have been suggested and used, from time to time, for the purpose of absorbing and deodorizing fecal matter, not one, perhaps, is so interesting to those engaged in sanitary science, says the *Lancet*, July 7, 1888, as the one whose properties were demonstrated at a meeting held in St. Stephen's Hall, Princes Street, Westminster, on Tuesday last, inasmuch as the material used—viz., common slag—has puzzled for a long time many a practical chemist and engineer to know to what purpose it may with profit be applied. We remember hearing, however, some months ago, of the application of crushed slag as a dressing in agriculture for heavy clayey soils. It is said to be extremely porous, rendering the soil more absorbent, and is also of value as a manure on account of the notable quantity of phosphoric acid it contains. This most important subject of dealing with the sewage of our towns has been so much discussed, and is so well worn, that to point out the advantages or disadvantages of the dry-earth system over that of the water-carriage system were superfluous. Suffice it to say, the inventors of this new material for the defecation of sewage-matter (Messrs. M'Gregor and M'Arthur, of Dundee) take for granted that the advantages of the former system, at least in many cases, are unquestionable. They further claim for it the following additional advantages: (1) the cheapness of the material, the cost being roughly estimated to be from one to two dollars per ton, including crushing and carriage; (2) its supply being practically inexhaustible; (3) its porous property, which, independent of (4) its manurial qualities, renders it valuable to clayey soil. Dr. Redwood gives the following analysis of the material after use:

	Per cent.
Fixed inorganic matter, after ignition	71.68
Insol. silicious matter	60.50
Lime	2.85
Phosphoric acid	2.31
Organic matter, with ammonia and water	28.32
Ammonia, ready formed	.08
Organic nitrogen	.13
Equal to ammonia	.15

A sample was exhibited which had been in use five weeks ago, in which we failed to detect the slightest smell. The method of using it is similar to that adopted in the other earth-closets. The pan is first charged with a certain quantity of the crushed slag, and, after use, another quantity is put in, the total quantity necessary, according to the inventor, being a third less than ordinary dry earth—that is to say, six persons would require one-third of a hundred-weight of defecating matter per week. These assertions are so strong that a careful trial of this method, and, indeed, of any new method which aims at the healthy as well as useful disposal of so great a nuisance, is well worthy the consideration of every sanitarian.

"Pharmaceutical Specialties" in Belgium.

The Liège Medico-Chirurgical Society has addressed a communication to the Belgian Minister of the Interior on the subject of a royal order referring to "pharmaceutical specialties," which was published in March, and which, though admirable as far as it goes, leaves, in the Society's opinion, considerable room for improvement. The order provides that pharmaceutical specialties must bear a label indicating the names of the substances comprised in them. The object of this is to prevent the pharmacist from selling medicines of the composition of which he is ignorant; but it does not apply to specialties sold directly to patients by the pharmacist when he has made them up himself. This regulation, the Liège Society suggests, should be extended so as to include the obligation to affix not only a qualitative but a quantitative label, and also to compel all pharmacists, even those who have themselves made up the specialties, to conform to the rule. It is also hoped by the Society that the Government will see its way to a considerable amount of restriction on the pharmaceutical advertisements in political journals. The Society remarks that pharmaceutical specialties intended for prescription by medical men ought certainly to indicate the dose of each component, for the prescriber's guidance. As to those intended for the indiscriminate use of the public, and which are supposed to cure nearly all diseases, the existence of these is objectionable; but, if they are allowed at all, the dosage should be clearly indicated. This might, perhaps, operate as a caution to a purchaser, as it would suggest a doubt as to whether the dose was a proper one for his particular case. The exemption from the regulation of the pharmacist who has himself made up the medicine would seem to encourage pharmacists to take upon themselves the functions of medical men, a *rôle* they are only too apt, as it is, to play. This exemption ought certainly to be abolished. —*Lancet*, July 7, 1888.

Dr. Atlee's First Ovariotomy.

We are informed that the patient upon whom Dr. John L. Atlee performed his first ovariotomy, in 1844, is still living. The operation was a double ovariotomy, and was the first of that character ever performed.

Dr. Ehler, of Lancaster, assisted at the operation, and he says that the patient occasionally visits him.

Use of Drainage-Tubes After Ovariotomy.

Dr. Charles E. Taft, late House Surgeon to the Woman's Hospital, New York, in a communication in the *N. Y. Med. Journal*, July 14, 1888, expresses his opinion regarding the use of drainage-tubes after ovariotomy, in the following propositions:

"1. A glass drainage-tube of rather small diameter and thick walls should be used in preference to all others.

"2. A drainage-tube should be inserted when in doubt and when any of the causes for its use are present.

"3. A tube which is not perforated along the sides answers every purpose.

"4. The contents of the tube should be removed at very frequent intervals—every half-hour to three hours.

"5. One of the greatest uses of the tube is in the early demonstration of hemorrhage.

"6. A tube should be removed just as soon as the discharge becomes clear serum.

"7. When a drainage-tube is left in too long, a sinus remains which it is frequently impossible to close, and there is an increased liability to hernia.

"8. In draining a sac, a large and free opening made at the time of operation seems preferable to sewing the sac-walls closely around a drainage-tube."

A Good Reply.

A Detroit attorney thought he made a strong point when he asked an expert witness in court, recently, if there was anything injurious to health in the water used by the defendant to adulterate milk. The proper answer to such a question, says the *Pharmaceutical Era*, July, 1888, would be a most emphatic "yes, as injurious to health as nitrogen substituted for atmospheric air to breathe; thousands of children in our cities die annually from feeding them water instead of milk." In truth, no one but a lawyer would think it smart to ask such a question, and there are few juries who have not intelligence enough to see how weak a cause must be which requires a resort to such transparent trickery for its defense.

Mississippi Valley Medical Association.

The Mississippi Valley Medical Association meets at St. Louis, September 11, 12, and 13 next. The first day will be given to the discussion of abdominal surgery; the second, to infant-feeding and some obstetric subject; the third will be taken up with volunteer papers and some neurological subject. The Society cordially invites all members of the profession to be present. Arrangements are being made for reduced rates, in regard to which, communications may be addressed to Dr. J. Lucius Gray, Secretary.

This Association always has good meetings, and the coming one gives promise of being like the former ones. Those who have a chance to go should be sure to do so.

NEWS.

—Franz Zuppel, of Laurel Run, Pa., swallowed two ounces of chloroform liniment, while drunk, July 30, and died in two hours.

—Telegraphic reports from Jacksonville up to August 18 indicate that the yellow fever there is under control, and that the confidence of the people is being restored.

—The Landtag of Finland has sanctioned a law which imposes a fine on persons convicted of prostitution. Forty marks (about $8) for the man, and half as much for the woman.

—The State Boards of Health of Louisiana and Mississippi, and the authorities of Columbus, Georgia, have declared quarantine against the towns in Florida infected with yellow fever.

—The City Council of Atlanta, Georgia, has added $5000 to the fund of the Board of Health, in order to keep the city in a healthy condition. There are many Jacksonville refugees in the city.

—One case of small-pox has developed in the State prison at Trenton, N. J. Vaccination of the 900 convicts was begun August 13, and a general fumigation has been performed. All work in the shops is suspended.

—In a note to the Academy of Sciences of Paris, July 23, 1888, MM. Teissier and Germain Roque stated that they had been investigating the toxicity of albuminous urine by injecting it into the auricular vein of the rabbit. The results obtained are not given.

—Dr. Caroline S. Rodgers, of Rochester, N. Y., has been appointed examining physician to the department for women of the State Industrial School. This is said to be the first time the State has made an appointment of this kind. Dr. Rodgers is well known in Rochester society.

—The Health Officer of Philadelphia, in a report to the Board of Health, August 16, stated that during the previous week 8 cases of small-pox, 10 of diphtheria, 173 of typhoid fever, and 13 of scarlet fever had been reported; while there were 2 deaths from small-pox, 28 from typhoid fever, 2 from diphtheria, and 4 from scarlet fever.

—The *Atlanta Med. and Surg. Journal*, August, 1888, says that, at a recent meeting of the Atlanta Society of Medicine, one of the members offered a resolution pledging the members to boycott all drug-stores where counter-prescribing was indulged in. The resolution was not passed, because the members believed the boycott would be universal, and therefore impracticable.

—Mail-matter from Florida has been concentrated at a fumigation-station near Waycross, Georgia, and will be thoroughly fumigated and forwarded to its destination. All mail originating outside of Florida is sent to its destination in that State by whatever route remains open by day, and by which it can be delivered without passing through infected or quarantined districts.

—The *Lancet*, August 4, 1888, says that a case of partial sloughing of the cornea is reported by Dr. Kuritzin, due to exposure for nine hours on a Russian steppe, driving against a snow-storm. Both eyes were similarly affected, somewhat deep ulcers having formed, in shape and position corresponding to the openings between the eyelids. The other parts of the eyes were scarcely affected at all. The patient, who had never previously suffered from any affection of the eyes, made a good recovery.

—The *Boston Med. and Surg. Journal*, August 9, 1888, says Judge Aldrich, of the Superior Court, granted an injunction, August 2, restraining Dr. Frank L. Weir from practicing as a physician in Taunton, Mass., or within ten miles of Taunton Green, for five years, under an agreement made with the plaintiff in this case in July, 1887. The plaintiff, who went abroad, leaving his patients in the care of the defendant, alleged that, in violation of the contract, the defendant had opened an office in Taunton.

HUMOR.

HARD PRESSED.—"If anybody was ever more pressed for time than I am, I'd like to see him." "There is such a fellow on exhibition at the museum." "Who is he?" "An Egyptian mummy."—*Life.*

A THINNER KIND.—"I tell you what it is, Bovine, the milk you serve is the thinnest kind I ever saw." "Well," said Bovine, "if it is thinner than the milk of human kindness, I'll give up the business." Bovine is still in the business.—*Harper's Bazar.*

"WELL, JAMES," said the chiropodist, "we must keep up with the times. Look at this new sign." "Capital!" exclaimed the assistant. "That will surely catch the public." Then he went out and tacked up a sign that read: "Corns Removed While You Wait."—*Detroit Free Press.*

EDWARD: "I suppose you learned at Vassar the inexplicable difference between the anatomy of a dog and that of other animals?" Sophia (who has just been graduated with an M.D.): "Why—er—no, that I remember. What is it?" Edward: "His lungs are the seat of his pants."—*Life.*

DRUGGIST: "Yes, I want a prescription-clerk. Have you a diploma?" Applicant: "Not exactly, sir, bu—" Druggist: "Can you run a soda-fountain?" Applicant: "Not very well, sir, but I can learn." Druggist: "No, I guess you won't do. I might let you practice putting up prescriptions, but I can't afford to risk an inexperienced hand at the soda-fountain."

ASTONISHED INDEED.—The Editor's Wife: "Charles, I have just read that M. Gregoki, the editor of the *Athens Gazette*, writes three columns of editorials every day of his life. Isn't that astonishing?" The Editor: "Not at all, my love. I frequently write four columns a day." The Editor's Wife: "Ah, yes, Charles, but M. Gregoki writes in Greek. Think how difficult that must be!"—*Harper's Bazar.*

A WEST END THIEF, who was arrested Monday night for drunkenness, said on Tuesday that it was a downright shame. "For," said he, "I am a thief, and a good one, and it will hurt my reputation among my pals to be arrested for simply being drunk. If it was for robbery, or something like that, I wouldn't care, but I don't want to be arrested for drunkenness."—*Boston Journal.*

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Clinical Lecture.

VESICAL FISTULA; FIBROID OF UTERUS; Etc.

BY JAMES B. HUNTER, M.D.,
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Case of Vesical Fistula.

The patient before you is 53 years of age, and more than twenty years ago was a patient in the Woman's Hospital. She was operated upon several times by Dr. Emmet for the cure of a large vesico-vaginal fistula. A great part of the base of the bladder had sloughed away. The cause of the fistula was a severe labor, lasting over twenty-four hours, and ended by the use of forceps. I myself was house-surgeon in the Woman's Hospital when she entered, and well remember her condition, which was one of the most deplorable I have ever seen. She was ultimately cured of all but a small cervico-vesical fistula, which remained for many years, but has now ceased to occasion her any trouble. Her complaint now is of slight prolapse of the anterior vaginal wall, and a feeling of pressure on the bladder. When standing or walking for a long time, she has slight incontinence due to cicatricial contraction laterally, in consequence of which the lower portion of the urethra is retracted and its proper functions interfered with. She has not much pain, and ordinarily there is no involuntary escape of urine. But the capacity of the bladder is small, and she has to empty it at least every three hours. She is entirely relieved of nearly all her symptoms by the introduction into the vagina of a small glass ball, which presses the neck of the bladder somewhat forward.

The case is a very interesting one, as showing what extensive loss of the vagina may be repaired. The patient has been actively engaged most of the time on foot during all the years that have elapsed since she left the hospital.

Fibroid of the Uterus.

This patient is thirty-eight years of age; has had one child and one miscarriage. Seven years ago she began to complain of pain in the back and menorrhagia. On examination we find the body of the uterus apparently about four times its normal size, and we find that the sound passes four and one-half inches, and to the left side. The solidity of the mass is evident to the touch, and it is also evidently continuous with the uterus.

There are several ways of treating these cases; we are guided largely by the symptoms, by the size of the tumor, and by the age of the patient. This woman has not much pain, and complains chiefly of the excessive loss of blood at every period. We naturally suspect that this elongated uterine canal contains fungoids, and we satisfy ourselves of the fact by passing the blunt curette. Now, if we carefully scrape out all these granulations, and apply strong tincture of iodine to the surface, the hemorrhage will be arrested, and the patient will be relieved for three or four, or perhaps for six, months, though of course the condition is not otherwise benefited. If the woman were ten years younger, and the tumor were growing rapidly, more heroic treatment would be demanded. But if she can hold out a little longer, until the menopause, the

tumor will cease to grow, and may perhaps diminish in size. It is worthy of note, however, in this phase of expectant treatment, that the menopause is often delayed for several years on account of fibroid tumors. Medicines have very little effect upon these growths; but, in some forms of tumor, where the uterine tissue can act upon the neoplasm, the use of ergot tends to check the hemorrhage. The application of iron or other styptics is of no use whatever. The internal administration of quinine and of iron tends to increase the flow.

In case of a younger woman having a similar growth to the one before you, we have several means at our disposal for relief and cure. One to which much attention is now being directed is the use of a powerful galvanic current, after the plan of Apostoli, of Paris, who, when he was in this country, kindly operated upon a case for me in order to demonstrate his method. He passes one electrode of platinum into the uterus, and for the other electrode covers the entire abdomen with a mass of wet clay, much like a flax-seed poultice. Operating in this way, he is able to apply a current ten times more powerful than had formerly been employed for this purpose. This treatment, continued for ten or fifteen minutes, is not painful to the patient, and, if followed by no reaction, it is repeated two or three times a week. The result is a change in the nutrition of the tumor, and a partial arrest of its blood-supply. We have not yet used the method often enough in this country to speak of it with much confidence, but it is certainly worthy of trial. It is entirely different, you will observe, from the galvanic treatment by puncture, in which the object was to bring about by electrolysis a disintegration of a small portion of the tumor.

Passing to the surgical methods, we should first consider the propriety of trying Hegar's operation, which consists of the removal by abdominal section of the tubes and ovaries, the result of which is to bring about the menopause, and thus arrest the growth of the tumor, as it would be normally arrested had the woman reached the age of forty-five or fifty. This method is best adapted to single, rapidly-growing, and vascular tumors, and is less likely to be of advantage in case of multiple fibroids very dense in texture. The operation is not a very dangerous one, provided there are no adhesions; but it often happens that the ovaries and tubes are so attached down to the surface of the tumor that their removal is impossible. In such a case the operator has two courses before him. He may close the abdominal wound, and the patient will be no worse off than she was before; or he may proceed to remove the body of the uterus, clamping the cervix as a pedicle, and bringing it up to the abdominal wound. This operation has already been done several times in the Woman's Hospital this season, and has already been fully described.

Complete Laceration of the Perineum.

This woman is forty years of age, and has had four children and one miscarriage. The last child was born eleven years ago. Menstruation is regular, but always accompanied with pain. I first saw her about six years ago, when she had a complete laceration of the perineum, having no control whatever over the bowels. I operated upon the perineum at that time, and the operation failed. An operation upon a complete rupture of the perineum is a failure, if the sphincter ani is not perfectly united, and it is a failure if, above the sphincter, there remains the smallest fistula. In this case a small fistula remained. Two years later, the patient being in very much better condition, I performed the operation again, and you see the result before you. The laceration was originally a bad one, a rent extending for some distance up the posterior wall of the vagina. After the second operation, the vaginal wall was entirely united, and the sphincter also; so that now, as she tells you, she has perfect control. I have modified this operation considerably within the last six years, and I believe that I can attribute several failures in times past to the simple fact that I followed the directions given in some text-books, and passed a suture through the margin of the sphincter and completely around the rent in the vagina. This method is very likely to result in failure. A very important point in the operation is to denude a broad surface and bring it together carefully by interrupted sutures. The parts should lie together so easily that there is no tension on the sutures.

Time will not allow the description of this interesting and important operation in detail. I will simply say that for sutures, silver wire is best, though the operation may be done with silk, with catgut, or with silkworm gut. One point is important as to prognosis: if several years have elapsed since the sphincter-muscle was torn apart, that muscle may be so atrophied that no operation will restore it. This case was an

exceptional one in that respect, the sphincter not having undergone atrophy, though eight years had elapsed.

If the case is a recent one, and the sphincter-muscle very rigid, I stretch and manipulate it between the fingers as much as possible, so as to overcome its tendency to spasmodic contraction after the operation. If, after the sutures in the upper part of the wound are introduced, there is some tension, it is well to relieve it by incisions on the right and left side, otherwise the sutures are apt to cut out. The golden rule in this, as in most plastic operations, is to avoid all tension upon the sutures, which should merely serve to keep the parts in accurate apposition. The bowels should be very thoroughly moved before an operation of this kind, and they should be moved within three days of the operation, and never allowed to become constipated. They should be moved by a mild aperient rather than by enema. Castor-oil is probably the best.

Irritability of the Bladder.

This patient, when she first came to us a few weeks ago, had only one complaint, but that was a very serious one. She could not retain her urine more than an hour at a time, and sometimes, if we may take her word for it, she passed water every fifteen minutes during the day, and about every hour during the night. She had become excessively nervous, and showed marked signs of suffering. We found, on examination, no cystitis, no urethritis, and no tenderness on pressing over the bladder. What was rather remarkable about her case was, that the symptoms appeared rather suddenly during convalescence after a miscarriage. We found, on examination, a marked retroversion of the uterus, which, however, was perfectly movable. Placing the woman on her hands and knees, and making gentle pressure posteriorly, the uterus was put in place; and, wishing to expedite matters as much as possible, a retroversion pessary was introduced at once. The patient returned to say, a week later, that she had been almost entirely relieved, and that she could retain her urine easily for four or five hours in daytime, and during the whole night. She has worn the pessary since, and we shall allow her to wear it, probably for some months to come. The explanation of the symptoms in this case is that the uterus, which had undergone only partial involution, had fallen backward, and by its weight had so dragged upon the bladder as to flatten that organ and greatly diminish its capacity. This form of vesical irritability is much more commonly due to retroversion than to a mal-position in the opposite direction. Marked anteflexion often exists without causing any vesical symptoms whatever.

Communications.

CONSEQUENCES OF ACUTE SUPPURATION OF THE MIDDLE EAR, WITH SPECIAL REFERENCE TO OPENING THE MASTOID.

BY A. R. BAKER, M.D.,
CLEVELAND, OHIO.

The truth of the old saying, that an ounce of prevention is worth a pound of cure, is illustrated nowhere so forcibly as in the treatment of mastoid diseases. It is not altogether improbable that the time may come when the more serious surgical procedures recommended in this paper may no longer be necessary, owing to the early recognition and prompt treatment of mastoid inflammations. Although this is a consummation devoutly to be wished, so long as there is the present ignorance of these diseases among the general practitioners, who usually see and treat them in the early stage, and so long as a running from the ear, or even an earache, is looked upon by the laity as a trifling matter, and so long as the nasal douche and similar appliances are used indiscriminately for treating catarrhal troubles, and so long as no precautions are taken to protect the ears while bathing, we must expect to meet mastoid inflammations, often resulting in serious complications which may require surgical interference to save life.

In order to consider the subject of prophylaxis satisfactorily, it would be necessary to enter into a discussion of the entire pathology, etiology, and treatment of inflammation of the middle ear; but we must content ourselves by saying that "taking cold" must be avoided by daily cold sponge-baths, the avoidance of overheated rooms, the wearing of woolen underclothing in all seasons of the year, and careful attention to secure heavy-soled large shoes. The prompt recognition and treatment of aural complications of the acute exanthemata—especially scarlet fever—are of great importance. The use of the nasal douche should be abandoned. Great care should be taken, when any perforation of the membrana tympani exists, to plug the audi-

tory canal with cotton before bathing. All purulent discharges from the ear should be stopped as soon as possible. In any acute inflammation of the middle ear, it should, if pain be present, be syringed with hot water. The naso-pharyngeal cavity should be closely inspected and treated. The Eustachian tube should be kept pervious, and, if any accumulation of pus or serum be confined within the middle ear, the membrana tympani should be perforated at once. If all pain, fever, and tenderness on pressure be not relieved at once by the above measures, leeches should be applied. If all cases be thus treated promptly, intelligently, and skilfully, few cases of serious mastoid trouble will be encountered; but, even with the most skilful care on our part, we will occasionally meet a case of serious mastoid disease requiring more active surgical interference.

The history of the operation for the opening of the mastoid is one of the most interesting in the entire subject of otology. Probably no operation has been the subject of so many fierce debates, at one time receiving the hearty approval of the entire profession, and the operation even prostituted from its legitimate indications—that of providing a means of escape for the retained products of inflammation—to that of an empirical procedure to relieve a symptom: deafness. At another time the operation fell in such disrepute that von Tröltsch, in 1861, confessed that he would have hesitated to undertake the opening of the mastoid with any instrument but a probe, in a case which he reported, of suppuration of the middle ear, in which Wilde's incision failed to give relief.

There are many surgeons who have been credited with the first performance of this operation, and many of them without doubt deserved credit for their work in this direction; but the honor of establishing this operation upon a firm surgical basis belongs to M. Jasser, a regimental surgeon, in 1776. The details of his first case, as published in the *Journal de Méd., Chim. et Pharm.*, 1793, are so accurate and the indications for the operation so clearly described, that I will give a short abstract of this case.

"A soldier complained of a discharge from his ear. This matter was very fetid, and the patient occasionally experienced severe attacks of fever, accompanied with violent pains, particularly in the right ear. These symptoms were alleviated by bloodletting, laxative and refrigerant remedies, and the application of topical emollients and anodynes. These symptoms returned frequently, and were always treated in a similar manner.

"The patient came to the hospital again in 1776. He had a violent fever and extreme pain. He was bled three times in the space of two days, gentle laxatives were employed, and emollient injections and vapor-baths to the ear; blisters were placed upon the nape of the neck, and, behind the ear, leeches were applied. All these means were successively used and repeated several times. None of them, however, relieved him. The patient continuing to suffer and being without sleep, opium was occasionally administered.

"Ichorous and fetid pus continued to issue from the right ear. At the termination of three weeks, a soft elevation on the mastoid apophysis appeared. Emollient cataplasms were then applied, and the tumefaction disappeared on the following day. Some days after, it again appeared. At last, it was determined to make an incision in the tumor, an inch long. A few drops of a thin and acrid humor, nothing more, issued from it. Poultices were continued, but the pains were as intense as usual. It was then determined to open the bone, and a sound was introduced into the cells of the apophysis. A pectoral infusion, nothing else being at hand, was injected through the opening by means of a syringe. All the injection issued instantly from the right nostril. The pain abated, and, the wound being dressed in the dry manner, the patient went to bed and slept profoundly during the following ten hours. After dinner, the dressing was renewed and the same injection repeated. The discharge from the ear diminished daily, the odor and color of the matter became better, and in eight days he had neither pain nor discharge. The injections were then discontinued and the wound dressed with dry lint only. The bone was kept exposed for some time; but, as no sanies proceeded from it, a cicatrix was permitted to form, which was completed in about three weeks. From that period, the soldier continued to enjoy good health and felt no pain in the ear."[1]

The intelligent manner in which the case was treated by M. Jasser, more than a century ago, and the good sound surgical principles which guided him in his operation, would be creditable to any surgeon of the present time. But, unfortunately, the operation was soon enlarged, and was

[1] Saissy on the Ear, translated from the French by Nathan R. Smith, in 1829.

supposed to be useful in the following cases, as indicated by Arnemann, Professor of Medicine at Göttingen, and his followers:

1. When there is complete deafness, or when deafness pertinaciously increases.

2. When mucous fluids which are secreted in the ear remain there and produce congestion.

3. When the ears are painful and there is heard in them a continual ringing.

4. When the Eustachian tube is obstructed by mucous or other fluids which may be removed by injections.

5. For the purpose of relaxing the membranes and other soft parts of the drum of the ear, and thus giving pliancy to the small bones of the ears.

6. When the cells of the mastoid apophysis contain purulent matter, and when they are carious.

In the latter cases, Saissy very pertinently remarks: "The perforation of the mastoid apophysis is infinitely less painful, and the danger is nearly nothing, because nature accomplishes nearly the whole."

The utility of the operation corresponds to its necessity, and it deserves to be preferred to all other remedies. The reasons why it is preferable are so obvious that I think it is useless to designate them.

It does seem that, with such good authority for performing the operation, that von Tröltsch need not have hesitated to open the mastoid, even with other instruments than a probe. The indications for the operation are so clear in these cases that it seems that no one should hesitate, while in all the other indications, as formulated by Arnemann and his followers, it is as clearly contradicted. It could not possibly do good, and might do infinite harm. But it seems as though some evil genius held sway in the minds of the physicians who have had to do with this operation, urging them to perform it for all kinds of ear-diseases, and then, when some unfortunate accident, as the death of the Danish physician Beyer, who had it performed upon himself for the relief of a chronic proliferous inflammation of the middle ear, occurs, the operation is condemned in all cases and under every circumstance. While I have been a most enthusiastic advocate of the operation, and believe that hundreds of lives have been saved by it, I regret to say that I know of a case having been operated upon, within a few months, for the relief of deafness, and, when no relief was afforded, my published papers were quoted as sanctioning it. A gentleman called upon me, about two years since, for a continual ringing noise in the ear; he also complained of some dizziness and deafness, and insisted upon having an operation performed. I refused, assuring him it would do no good. He then consulted a general surgeon, a man of brilliant attainments—a keen surgical mind—who perforated the mastoid; of course, with no benefit. Now, it is such operations as these that bring it into disrepute. If surgeons only kept in mind the fact that it is not an operation to cure deafness, to cure dizziness, to cure pain, to cure any symptom (although it may incidentally cure all of these), but it is an operation to evacuate retained pus or remove dead bone. I may illustrate, in a crude manner, the object to be gained, upon this skull.

We have here the middle ear in close relations with the cerebral cavity above; the external auditory canal on the outer side, separated by the drum membrane; the amifis of Eustachian tube in front, and the mastoid cells behind.

Now, suppose this large cavity is filled with a purulent secretion; it must escape into the middle ear by a more or less contracted opening, and from there into the external ear through a perforation in the membrana tympani, or possibly through the Eustachian tube into the fauces. Now, what operation is more clearly indicated than to open directly into these cells at this point, and evacuate this purulent matter? The necessity of this procedure is doubly called for, because this focus of purulent secretion is in such close relation with so many important structures. There is above the brain, separated only by the merest shell of bone, often fenestrate in the normal condition. We have in front all the important structures of the middle ear. We have behind and on the inner side the transverse sinus, and on the lower side the jugular vein. The internal carotid artery and the facial nerve are also in very close relation, and not infrequently involved in the inflammatory action.

Some of the most frequent causes which lead to death as the result of mastoid diseases are caries and necrosis of the temporal bone, purulent meningitis, cerebral abscess, pyemia, septic phlebitis, thrombosis, and embolism. I have discussed this subject at some length in a paper read before the Northwestern Ohio Medical Association, and published in the January No., 1888, of the *Cleveland Med. Gazette*, in which I said that "I wish I could impress upon your minds the fact that, excluding the few cases

as the result of traumatic causes, cerebral abscess in the young or middle-aged is almost always the result of chronic purulent suppuration of the middle ear. It seems to have been one of the slowest lessons the medical profession has had to learn, that, when a collection of pus was found in the brain after death, it was a pathological process extending inward, instead of pus formed primarily in the brain and endeavoring to find its way outward. The ease with which an inflammation can be propagated from the middle ear to the meninges, and thence to the brain-substance, can be easily understood by a consideration of the anatomical points involved. The only wonder is that more people do not suffer from meningitis and cerebral abscess. But nature seems to have been leniently disposed toward us in this matter, and, so long as there is a free opening for the discharge of pus, serious brain-lesions are comparatively rare; but, let the outlet be closed, and we immediately have serious trouble. I surmise the frequency of death from cerebral abscess and purulent meningitis is very greatly underestimated by physicians in private practice, where post-mortem examinations are comparatively rare. I have collected notes of over fifty cases of this kind, from various sources, in which post-mortem examinations have proved that death resulted from the consequence of suppuration of the middle ear, either from cerebral abscess or purulent meningitis, and this list could be indefinitely extended by reference to hospital reports and the periodical literature of the past few years.[1]

"Deaths from pyemia, septic phlebitis, thrombosis, and embolism are not infrequent. The transverse sinus is the most frequently affected where it traverses the temporal bone on the inner side of the mastoid process. At this point it is in very close relations to the mastoid cells; but the superior petrosal or cavernous sinuses may be involved, and, when there is a fissure in the lower wall of the tympanic cavity, the jugular vein is very liable to be affected.

"These cases run a very uncertain course, but usually terminate fatally. Death occurs frequently within a day or two, with symptoms of cyanosis and collapse. At other times, the course of the disease is a chronic one. There may be chills, followed by long periods of comparative good health; there may be metastatic abscesses and all the series of symptoms of pyemia from other causes."

The indications for opening the mastoid process, as most recently stated, may be summarized as follows:[1]

1. Purulent inflammation in the mastoid process appearing in the course of suppuration of the middle ear when persistent severe pain in the bone cannot be subdued by the application of the ice-bag, leeches, or by Wilde's incision. (Schwartz.)

2. Painful inflammation in the mastoid process occurring in acute and chronic suppuration of the middle ear, in consequence of growths filling up the external meatus or the tympanic cavity. When attempts to remove the obstacle to the free escape of pus have failed, the operation is imperative. (Grüning.)

The operation is indicated even though the soft parts over the mastoid are not swollen or infiltrated. (Politzer.)

3. When the posterior superior wall of the meatus is bulging, and when, after incision, the abscess is not emptied, and the symptoms of retention of pus continue. (Toynbee, Duplay.)

4. Persistent pain and tenderness in the mastoid process, lasting for days or weeks, in which there is probably an osseous abscess not communicating with the tympanic cavity. (Politzer.)

5. In every suppuration of the middle ear combined with inflammation of the mastoid process, in which fever, vertigo, and headache are developed during the course of the affection, which may indicate a dangerous complication. In such cases the indications for the operation are vital. (Politzer, Roosa, Buck.)

It will be seen there is no allusion to deafness, noises in the ear, dizziness, etc., and I will repeat once more that the indications are simply for the evacuation of the products of inflammation and the removal of dead or carious bone. I will grant that there may be cases in which it is impossible to say whether there is retained pus or carious bone; but, if the symptoms are at all alarming, the surgeon would be justified in giving the patient the benefit of the doubt by making an exploratory operation.

There is much diversity of opinion as to the proper time to perform the operation of opening the mastoid. In a given case of acute inflammation of the mastoid, I have

[1] See Politzer on Diseases of the Ear, p. 526; Roosa, Treatise on Diseases of the Ear, Table of Fatal Cases, p. 554.

[1] See article by the writer, on indications for opening the mastoid process, in the *Cleveland Med. Gazette* for February, 1886.

been in the habit of pursuing the following plan of treatment: When the first indication of pain and tenderness appears in the region of the mastoid, leeches are applied, and the ear is syringed frequently with hot water. If the pain continues and there is noticeable swelling over the mastoid, Wilde's incision is made down to and including the periosteum, and hot poultices applied. In the vast majority of cases this is all that is necessary, especially if the throat and ear are properly treated, and a free exit of pus maintained by the diligent use of Politzer's bag and the syringe.

Of course, if there is any obstruction to the free discharge of pus due to infected serum, polypi, exostoses, or any other cause, it must be removed. If the pain continues and the swelling is not promptly relieved by Wilde's incision, no time should be lost in perforating the bone, as the dangers from delay are many.

The necessity for prompt action is as urgent, and the indications for its performance somewhat similar to that for the opening of a felon. Delay in the one case may result in the loss of a finger; in the other, of a life.

As this is an operation that every general practitioner may be called upon to perform, owing to the necessity for immediate relief many times before skilled assistance can be secured.

If you will pardon me for appearing pedantic, I will describe somewhat minutely the manner of performing the operation, and exhibit a few of the instruments made use of.

In making Wilde's incision, any stout sharp scalpel will answer all practical purposes. The incision should be made from below upward, so as to avoid any danger of injuring the structures in the neck. Anyone not having experience will be surprised to find how deeply the bone is situated in this region, especially if the tissues are swollen and infiltrated. It is not necessary to avoid the posterior auricular artery, as the course of this vessel is so variable that you will probably not succeed. The free hemorrhage is salutary rather than otherwise, and can be controlled by pressure if necessary. The incision should be made close to the auricle, an inch and a half in length, and connected with a shorter horizontal one slightly above the linear temporalis. The teguments, together with the periosteum, are then reflected backward and downward, placing the entire mastoid under inspection. If any sinus exist, they will be readily discovered, and the operation will consist in simply enlarging the existing opening. Formerly trepans were used for perforating the bone, and these were replaced by drills, which are still used by Buck, Jacobi, Lucae, and a few others. But, owing to their soiling the wound with splinters, and the difficulty with which they are controlled when advancing in the deep parts, I very much prefer the chisel, as recommended by Schwartz. The drills always seem to me like dangerous instruments; if, unfortunately, the cerebral cavity or one of the sinus be perforated, it would be almost impossible to avoid wounding the meninges, while, with the chisel, little or no harm would result, as every step of the operation is under the eye of the surgeon. It is generally necessary to administer an anæsthetic, although I have performed the operation several times without doing so. The linea temporalis and the more or less strongly developed protuberance on the posterior superior orifice of the osseous meatus, so strongly urged by authors, are very nice guides theoretically, or to point out an exceptional skull in the class-room, but practically are seldom well enough developed to be of any use to the operator. The best guide is to take the superior wall of the meatus as the upper boundary, and the angle formed by the plane of the mastoid with the posterior wall of the external meatus for the anterior boundary, when opening the mastoid. This is best determined by pressing the finger into the meatus. Often in children, and when the bone is diseased in adults, the cortical plate of bone can be removed with the hand-chisel, and we come at once upon the pus-cavity, or diploë, or cholesteatomatous epidermic masses, or a sequestrum of dead bone, or bleeding granulation-tissue, or whatever the case may present. Sometimes the external plate is very thick, and we have to chisel our way carefully for almost an inch before reaching the diploë, or may even find the entire mastoid process sclerosed.

No absolute rule can be given as to the depth it is safe to penetrate. Schwartz says "Never go deeper than 25 mm." Buck says "It is better to place the extreme limit at 20 mm."—about three-fourths of an inch.[1]

Occasionally in old chronic cases the entire mastoid process will be found sclerosed and of ivory hardness. In these cases it is not best to seek for mastoid cells which do not exist, but endeavor to penetrate the

[1] Baker. Cleveland Med. Gazette, Feb., 1886, p. 168.

aurum mastoidum, and thus reach the middle ear; but even this may be gained only with great difficulty, and, unless there is some obstruction to the free escape of pus through the external meatus, which cannot be removed, it is often best to desist from further attempts to reach the middle ear when this condition is found to exist.

In addition to the chisels, a bone knife with a concave cutting-edge for enlarging the external osseous shell, a sharp spoon for removing the granulation-tissue, diploë, etc., a few blunt and sharp pointed hooks, dressing-forceps, probes, ligature, etc., such as are found in any pocket instrument-case, will be required; also a good syringe and a carbolized bichloride, or whatever antiseptic solution the surgeon is in the habit of using. I prefer powdered iodoform dusted into the wound to any other dressing, and, instead of the various drainage-tubes or lead nails so highly recommended by some, I use a simple piece of cloth well saturated with iodoform.

I am aware that this is considered by many a serious operation, and Politzer has said "that no one should operate on the living without having performed the operation at least forty or fifty times on the dead." Yet I believe that no physician should permit a patient to die from the consequences of acute suppuration of the middle ear without first giving him the benefit of this operation, as the indications for its performance are so imperative.

MORPHINE AS A CAUSE OF ACNE ROSACEA.

BY CHEVALIER Q. JACKSON, M.D.,
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Rosacea, one of the most common of the dermatoses, is attributed, by dermatological writers, to certain reflex vascular disturbances of the facial circulation, consequent upon stomachal, intestinal, and uterine derangements. While this is true in a certain proportion of cases, there are many which consult the dermatologist in which no such disturbance exists. In a large number of the latter class of cases, I have found the morphine habit, which, at the present time, is so startlingly prevalent, to be the chief etiological factor. Since I first observed this, a number of cases have come under my observation, in which the rosacea was directly attributable to the use of this narcotic. As all these cases were very similar, it will serve my purpose sufficiently well to give the condition and clinical history of the first three.

Case I.—M. M., 25 years old, a bookkeeper by occupation, came to my office for the treatment of a marked outbreak of acne rosacea, involving the integument of the nose and a small portion of the face. On questioning him, I learned that the trouble had commenced about a year previously, in the form of a most severe pruritus. A few months later, there appeared a faint red blush, with sometimes a single isolated papule. This condition at that time was not constant, being unpleasantly prominent only after a more than usually excessive indulgence in morphine, or after a prolonged spell of cold inclement weather. It was usually accompanied by more or less seborrhœa, and was soon followed by a permanent redness, with gradually dilating capillaries, together with a swollen and more or less pustular condition of the dermal glands—as the patient himself expressed it, "mattery pimples."

At the time he came under my care, the disease was well advanced in what has been somewhat arbitrarily called the second stage of the disease, and, had it not been arrested, would, in all probability, have shortly crossed the arbitrary and ill-defined line into the third stage, for there was already present extensive thickening and infiltration, together with a decidedly hypertrophic condition, together with incipient tendency to lobulate, round, elastic outgrowths. The glands were enlarged, swollen, pustular, and slightly painful, with here and there large comedones. The vessels, enormously dilated, were to be seen ramifying in every direction, the morbid process extending, however, but little beyond the nose. The parts were warm to the touch, and would often, after exposure to sudden changes of temperature, become purple. A section cut from near the ala nasi showed, on microscopic examination, a markedly thickened mucous layer, infiltrated with inflammatory new formation, while the epithelial layer, on the contrary, was much thinner than normal, being almost absent in some locations. The walls of the vessels cut in section were much hypertrophied.

In searching for the cause of the local morbid process in this case, I ascertained that he was a total abstainer (which I had good reason to believe, as far as alcohol was concerned), and that he had had no gastric disturbance until a few weeks before he consulted me. The entire alimentary canal was in fairly good condition, with the exception of some slight constipation, of which he had relieved himself by an occasional Seidlitz

powder. His general appearance indicated average health, save for a constant nervous movement of the eyeball and markedly contracted pupil. These two latter facts, together with the fact that the trouble had commenced with a severe pruritus, led me to make inquiries to ascertain if the patient was addicted to the use of opium or its alkaloid. This he strenuously denied, until, under the pretense of wishing to look for the eruption on other portions of the body, I had him remove the clothing from his lower limbs, when I discovered that a portion of the anterior surface of the left thigh was dotted here and there with small papular and pustular elevations, which, after slight hesitation, the patient acknowledged to be the result of the use of the hypodermic syringe. He stated that for a year and a half he had been in the habit of injecting morphine subcutaneously into his thigh every night at bedtime. At first, he took in this way one-eighth of a grain; later, he increased the quantity to a quarter-grain, which dose he had not exceeded. He claimed he had only injected the drug once daily, and that always at bedtime, which accounts, probably, for the absence of stomach trouble. The patient also stated that he always took a cup of strong coffee in the morning before rising, which would further tend to neutralize the tendency of the morphine to cause nausea and gastric irritability. The papules and pustules spoken of above as being produced at the point of injection may have been due to the crude and ill-made rusty needle used, or to dirt, lint, oil, or other foreign matter being injected; or, as I have occasionally seen, to an idiosyncratic sensitiveness of the skin to morphine, which manifests itself in a papule at the site of injection.

Acting on the theory that the morphine was the cause of the rosacea, I directed the patient to abandon its use gradually during a period of not less than two months, reducing the amount taken by one-sixteenth of a grain at regular periods of two weeks, meanwhile having him take sufficient doses of the bromides to enable him to sleep, giving him during the day full doses of caffeine, with the hope that it would counteract the effect on the rosacea of the morphine he was taking. During this time, no local treatment was instituted.

At the end of the two months, the condition of the rosacea was markedly improved; the color had become paler and the acne papules had almost disappeared. The patient was now compelled to give up entirely the use of morphine. The bromides were continued for two weeks and then stopped. At the end of four months after having stopped the morphine, all that remained of the rosacea was a few scars, with some slight hypertrophy and a number of dilated capillaries. The hypertrophy was removed by daily applications of the galvanic current, and the enlarged vessels were obliterated by electrolysis, using the needle with which superfluous hair is removed.

Case II.—A. E. W., 35 years old. The course of the rosacea, in this case, was very similar to that of the first case, except that it was much slower in development, and that the morphine was taken by the stomach, in smaller doses, and from twice to three times daily. The skin of the nose was somewhat thickened and infiltrated, but there were few acne papules, and altogether the disease manifested itself in a much milder form than in the preceding case.

I placed this patient under the same restrictions as to morphine, reducing at first the quantity taken at each dose, and finally the number of doses daily, until the habit was entirely abandoned. I refrained from all treatment in this case, save a simple placebo given internally. In a remarkably short time, the cutaneous tissues commenced to resume their natural appearance, and continued steadily to improve until, at the end of three months, the affection had disappeared, except a slight erythema, extending over a portion of the area originally covered by the disease. This erythematous condition of the surface has since disappeared under simple local treatment.

This patient stated that he had never suffered with gastric disturbances, stating that his appetite was always good, with little or no constipation, and a very thorough search failed to indicate any other cause than the morphine for the typical rosacea which existed when I first saw him.

Case III.—Mrs. ——, 24 years old. This woman, an actress, had been using morphine for a number of years, but never continuously until recently. Some time before the appearance of the rosacea, she had commenced taking the drug for the relief of a very severe dysmenorrhœa, from which she suffered severely up to about a year before she consulted me. She would take the morphine hypodermically during a week, commencing two days before she was unwell, at which time the pain made its appearance. Shortly after beginning the use of the drug, she was troubled with a severe itching of the

nose, which, at first, continued only through the week during which she used the narcotic, disappearing in the interval during which she took none. But, by degrees, the pruritus began to linger for a gradually increasing period of time, until it was almost constant. At the same time, the sebaceous glands began to enlarge and take on an inflammatory condition, forming papules and pustules. This condition was always much ameliorated, and would, at times, almost disappear, in the interval between the periods, only to return at the next menstruation, if she took morphine. She herself had noticed that, when she took chloral instead of the opium alkaloid, the rosacea did not show the least exacerbation; and she would have used the former drug, in preference to the latter, if it had had sufficient anodyne qualities to relieve the pains of the dysmenorrhœa, which finally became so intense that she was led to consult a New York gynæcologist for permanent relief. As nearly as I could learn from the patient, he told her she was suffering from anteversion associated with a narrow contracted canal. He used forcible dilatation, under an anæsthetic, which entirely removed the dysmenorrhœa, since which time (about a year before I saw her) she has menstruated regularly, without any pain whatever, or any symptom of uterine disturbance; and a periodical examination, made every two months during the year by the same gynæcologist, failed to discover any trace of an abnormal condition of any kind. During this period, however, the rosacea had not been improving, but, on the contrary, was rapidly developing lobules and becoming more and more disfiguring, which the patient herself thought was due to the morphine, the use of which she was unable to discontinue, although the pain had disappeared.

At the time I saw her, the condition of the integument indicated a most marked case of acne rosacea, gradually developing the symptoms which indicate the third stage.

As she was too confirmed in the morphine habit to be broken of it by any other means, I had her husband place her in a private hospital for the treatment of opium habitués, with instructions that she should have absolutely no treatment whatever, save the regular house treatment, to overcome the cravings of the system for the narcotic.

Three months later, she came into my office, with a nose of which she said she was not ashamed. Upon examination, I found that all that remained of the original disfigurement was a number of scars and a slightly hypertrophic condition of the skin. There also remained a few dilated capillaries and some stout bristly hairs that had commenced to develop, owing to the increased nutrition of the parts. These I removed, together with the dilated capillaries, by electrolysis.

Now, the history of these three cases indicates so clearly that the morphine had a primary causative relation to the rosacea, that scarcely any argument is required to establish the fact. In the first case, it might be argued that the drug was only indirectly the cause, acting simply by creating gastric, intestinal, and other disturbance which, in turn, produced the skin-affection, were it not for the fact, which I stated before, that all the functions were not interfered with by the drug, which was probably due to the manner in which it was taken.

In the third case, it would be possible to attribute the rosacea to uterine derangement, were it not for the fact that the removal of the dysmenorrhœa did not in any way benefit the condition of the nasal integument, which continued to grow worse as rapidly as before. Surely, if the morbid process located in the skin of the nose was due to the uterine trouble present, the removal of the latter would cause the rosacea to disappear. I am aware that it will be argued that there may have remained some remnant of the former uterine trouble to keep up the reflex irritation; but, if such existed, it failed to show itself in any symptom whatever. There was not the slightest endometritis, cervicitis, erosion, displacement, or any abnormal condition, ovarian, tubal, vaginal, uterine, stomachal, nervous, or intestinal. The patient did not "touch, taste, or handle" alcoholic liquors of any kind; was neither anæmic nor chlorotic, being plump and healthy save for an abnormal paleness of the skin (except on the nose) and the contracted pupils.

In all these cases there was a marked pruritus, commencing before the appearance of the eruption and continuing during the progress of the trouble, to a greater or less extent. This pruritus is seldom if ever present in any appreciable degree in rosacea from any other cause, but is an almost constant physiological action of morphine. The itching causes the patient to rub, scratch, and otherwise irritate the parts, thus causing an inflammatory condition of the surface, which would, perhaps, to some extent, tend to the development of a rosaceous condition. I am certain, however, that morphine, when taken into the system, has a

direct selective action on the nasal integument. The fact of its producing pruritus at this point, and so very slightly or not at all over the general surface, indicates this.

I have now under my care three cases of eczema rubrum, in which a small dose of morphine, given three or four nights in succession, will produce a crop of acne papules, with a pruritic and erythematous condition of the skin of the nose.

On mentioning my ideas on this subject to a medical friend of mine, he told me that he occasionally took a quarter-grain dose of morphine, while traveling, to enable him to sleep on the cars, and that it almost invariably produced a bright red papule, very sensitive to the touch, and so disfiguring as to lead him to substitute for morphine paraldehyde, although the former was so much more inconvenient to take.

These facts, all taken together and viewed in conjunction with the above-described cases, indicate, I think, very clearly, that morphine has a direct action on the blood and nervous supply of the nose. Whether this action is through the vaso-motor, sympathetic, or general nervous system remains to be investigated. My own opinion is that it is due to the passive hyperæmia produced by the drug. The well-known physiological action of morphine is to lower arterial tension, dilate the arterioles, and produce this passive congestion, which is always present in the early stages of every case of rosacea, from whatever cause produced. Following this passive hyperæmia would be the inevitable reaction, which would produce the sensation of pruritus the same as the reaction from excessive cold. Further, this condition of passive congestion, if kept up or frequently renewed, would certainly lead to an altered condition of the nutrition of the parts, causing hypertrophy and other symptoms of rosacea, entirely independent of any local direct irritation by rubbing the nose for relief of the pruritus; this mechanical irritation, however, probably aids in the causation of the pathological processes.

As it is not always possible to elicit from the patient a confession of the use of opium or morphine, the fact will usually have to be arrived at from the general aspect of the patient. Dilated blood-vessels and other objective symptoms, together with the subjective symptom of marked local pruritus, are usually the first manifestations of the disease. This is in marked contrast to ordinary rosacea, in which pruritus never occurs to any appreciable extent.

In any case of this most obstinate malady, a cure always depends on the discovery and removal of the exciting cause, and, as this is often difficult to discover, any light thrown on the subject will always be welcome, not only to the dermatologist, but to the general practitioner as well. Let this be my apology for presenting this paper.

ON THE TOXICITY OF THE "FRUIT JUICES."

BY W. H. MORSE, M.D.,
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It is not alone in alcoholic liquors that fusel oil is an available poison, though, for obvious reasons, the fact is one that is not of general recognition even by physicians. The chemist does not need to be told that the poisonous oil is afforded in much of the cheap "soda water" and confectionery. There is just ground for placing not a little of the "soda water" in the same category with the "rot-gut" whiskies of the saloons. Not that it enters into the composition of the carbonic-acid water commonly known by the name of "soda water"—an allegation that any manufacturer would be justified in denominating a distinctive libel. The trashiest stuff sold at the soda fountain would not merit such a charge; indeed, the toxic water is more apt to be the article dispensed from the most reputable and "fashion-patronized" fountain, though it is, as well, dispensed at the "cheap-john" stand and the three-cent-a-glass stores.

It is made an ingredient by the flavors of the water—the "pure fruit juices" of the able manufacturing chemist. What is a "pure fruit juice" or a "fruit essence"? Looking at the matter casually, the innocent consumer would be ready with but one reply: "A 'fruit juice' must be the juice of a fruit." That is one way of looking at it. It is true that there are the juices of fruit which are used as "fruit juices," but I think that I do not err in stating, upon a recent estimate, that, for every pound of the real juice that is used in the drug-stores, there are used from 60 to 100 pounds of artificial "juices." These comprise a large list: strawberry, raspberry, pineapple, wild cherry, peach, prune, orange, elderberry, fig, currant, blackberry, raisin, several varieties of grape and pear, quince, cranberry, lemon, lime, apple, and, in fine, "any fruit desired."

There are many kinds of these factitious preparations, but practically the varieties are but two, namely: those in which amylic

alcohol is used, and those which employ the ethylic. This is explained in this way: Several of the compound ethers possess the odor and flavor of certain fruits. Present in these compounds are the two simple ethers known as the ethylic and amylic. Each of these has a base and an alcohol; that of ethylic ether corresponding to ethylic alcohol, and that of amylic ether to amylic alcohol or fusel oil. Chemically speaking, these alcohols are, respectively, hydrated oxides of ethyl and amyl. It will therefore be apparent that the essential bases are the alcohols; and obviously—for commercial reasons—the amylic alcohol has the precedence, and is at once the most common and the most culpable of the two artificial preparations.

I happen to know—and the knowledge is scarcely of a kind to be a matter for pride—that the manufacturer prefers the amylic alcohol, arguing that it "works" better than the ethylic, and is "cheaper." Let us look at the "inner workings" of this manufacture.

Take, for instance, a few of the most popular juices. Pineapple juice contains ten parts of butyrate of amyl; strawberry, two of butyrate and three of acetate of amyl; raspberry, one of each; apple and lemon, ten each of valerianate of amyl; orange and pear, ten each of acetate of amyl. Other juices are "all of a kind."

The genesis of acetate, butyrate, and valerianate of amyl is chemically suggestive. The first-named is prepared by distilling one part of fusel oil or rank amylic alcohol with one of concentrated sulphuric acid and two of acetate of potassium, subsequently freeing from free acid and water. The valerianate is made by mixing four parts each of amylic alcohol and sulphuric acid, adding five parts of valerianic acid, and subsequently washing and purifying.

The acetate of amyl possesses in a most remarkable degree the taste and smell of the Jargonelle pear, and it is an alcoholic solution of it that forms the "pure juice of the Jargonelle pear." Add, to 15 parts of it, one-half of one part of acetic ether, and in 100 parts of alcohol it forms "bergamot pear juice." Substitute butyric for acetic ether, and the solution is "banana juice." Again, an alcoholic solution of valerianate of amyl, in the proportion of one part to six of alcohol, forms "apple juice."

On the other hand, the acetate, the butyrate, and valerianate of ethyl are employed in the same kind of manufacture, but the essence or "juice," having the oxides of ethyl as constituent of their bases, are "weak." By this term is to be understood a lack of popularity—poor sellers, unpopular. Of this kind are such "juices" as melon, plum, gooseberry, grape, peach, and cherry, all of which contain the ethylic and lack the amylic oxides. To instance more particularly: One part of butyrate of ethyl in six to ten of alcohol forms "pineapple juice." This "juice"—together with "quince," one part pelargonate of ethyl in six of alcohol—constitutes the only popular "juice" of the ethylic series. But the "pineapple juice," it must be remembered, contains, nowadays, ten parts of butyrate of amyl to five of butyrate of ethyl, constituting the "improved juice."

Inquiry made of forty-seven New York, Philadelphia, Boston, and Cincinnati manufacturers of artificial juices, or, in the parlance of the average advertisement, "pure fruit juices," resulted in obtaining the following list of twelve "leaders": Pineapple, strawberry, raspberry, grape, apple, orange, pear, lemon, cherry, plum, apricot, and peach. One hundred and sixteen druggists were asked to "signify which of these twelve were the best sellers at the fountain." I will not give the lengthy "vote" in detail, but it will suffice that I found, in summing it up, that the favorite flavors with customers were as follows: Pineapple, lemon, orange, pear, apple, and peach.

It will be noticed that it is alone the peach juice that is popular, of the ethylic juices. There are some new favorites, not included in the list; but, without exception, they have basic amylic oxides.

It should, perhaps, be noted that, in addition to the ethylic and amylic oxides, some of the "juices" contain other minor constituents, as glycerin, chloroform, aldehyde, nitric ether, sebacic ether, salicylate of methyl, certain acids, and three or four ethylic salts of inferior valuation. These ingredients are used in modification, to bring about or preserve more nearly the fruitic resemblance. To procure a "natural color," certain other chemicals are employed. As to any combination being made with the true essences, I have only to say that orange "juice" does contain ten parts essence of orange; but it is the one solitary instance in kind, though lemon, raspberry, and grape purchase an acid taste with tartaric and succinic acids.

In a burst of confidence, one manufacturer boasted that no one could distinguish his syrups made with artificial juices, from the

officinal syrups; but, although he made a very good and popular line of syrups, factitious character considered, I had the pleasure of showing him that his lemon, raspberry, strawberry, and pineapple syrups were utterly unlike those which are officinally prepared from the fruits after the formula of syrup of lemon.

Three other points were followed out:

1. As to the preference of known alcoholic liquor drinkers.

The favorite flavor with this class was found to be the juices of the amylic series—a significant fact.

2. In the matter of the so-called "soda-water intemperance," as to the preference of those so addicted.

It did not require a very close search to discover that the preference of this class was for soda water flavored with the amylic oxides.

3. As to any preference which physicians have in "prescribing" soda water.

The outcome of this line of research was the discovery that, where medical men prescribed other than "plain soda water," they were "always careful to specify the pure fruit juices." "But if you do not have such?" I asked a prominent pharmacist. "Well," he said, with a knowing wink, "it saves me the doctors' custom, if I'm all out, excepting peach." Peach juice (artificial) does not contain fusel oil.

The plain fact — and ever becoming plainer and plainer as I investigated the matter—was that the artificial had largely crowded the natural juices to the wall, and that, though there are artificial "juices" which are of chemical purity and non-injurious to the health, the favorite artificial "juices" are those which are base with fusel oil. More of these than of the other are manufactured and drunk, and, as a rule, the baser they are with fusel oil, the greater is their popularity. It is also just to remark that these factitious essences are extensively used for flavoring candies, ices, and jellies, to the greater or lesser exclusion of the natural juices; and that, as in the case of the fruit syrups, both manufacturer and retailer prefer those toxic with the fusel oil.

The question will occur: Are we, then, to rank soda water and confectionery which are flavored with a fusel-oil product as of a toxic character? We can make but one answer: A poison is a poison, whatever its dose or form of exhibition. Strychnia, arsenic, fusel oil, or any other poison, is of a toxic character in large and in small doses. The only way to prevent the action of a poison is to decline it the privilege of acting. The minute dose may not procure any harm, but it is not always of such characterization, and the best plan is to leave it alone altogether. My investigations go to show that the class of fruit juices in question is deleterious, and, if the law for the sale of poisons will not touch the case, there is a statute governing adulteration. The demand should be for pure natural fruit juices, and, next to them, for pure artificial juices. There is no excuse for the manufacture and sale of those that are more or less toxic.

SKETCHES FROM THE NOTE-BOOK OF A COUNTRY DOCTOR.

BY H. J. CRUMPTON, M.D.,
SAUCELITO, CAL.

Gun-shot Wound of the Scalp; Recovery.

A five-year-old boy managed to elevate and fire a loaded gun in such direction as to inflict an ugly scalp-wound on the person of his nurse, about 19 years old, who was stooping over and looking out of an open window. The child was some ten feet behind her. The charge of small shot struck near the posterior inferior angle of the left parietal bone, and, after ploughing a ragged furrow some two inches in length forward and upward along the surface of that bone, glanced off over the top of the head and passed out through the open window. Outside the immediate track of the charge, the scalp was loosened from the cranial bones over quite a surface. The following conversation occurred soon after my arrival: "Is she seriously injured?" "Yes." "Do you consider her dangerously wounded?" "Yes; all such injuries to the head are to be considered dangerous. During the war between the States, a serious death-rate followed what were at first considered simple scalp-wounds." This was not very reassuring; in fact, it was rather exasperating to those present, who saw there was little or no bleeding, and had just been told no shot had penetrated, that the skull had apparently escaped injury other than its denudation and loss of periosteum over not a very large surface. Bystanders said that immediately after the shot the girl showed much alarm; said she would soon die, asked them to pray for her, and soon after passed into syncope. She was in a semi-comatose state when I saw her, half an hour afterward, with feeble

irregular heart-action and labored respiration. She soon rallied, however, under guarded stimulation and friction to extremities.

The hair adjacent to the wound being clipped, the wound was cleared of foreign matter, including a few stray shot; the loosened scalp readjusted, every particle or shred of which, not entirely detached, no matter how badly torn and lacerated, was utilized as a temporary covering for the naked bone, with the hope of avoiding necrosis. Over the wound a compress, retained in place by a properly-adjusted bandage, was kept saturated with

Fluid extract of calendula	2 parts
Whiskey	2 "
Spring-water	4 "

The broken-down tissues with which the "furrow" had been roofed over soon degenerated into a hard shell-like eschar tissue, but remained an admirable covering, hermetically sealing the wound for the first ten days, during which there was not one drop of suppuration or discharge of any sort, little or no tumefaction, and scarcely a blush of inflammation. The pulse and temperature remained nearly normal, and all the conditions as favorable as they could be. On or about the tenth day, a corner of the covering was unfortunately detached, when the process of repair was shown to have progressed admirably. Now, atmospheric air, doubtless loaded with micro-organisms, for the first time gained access to the wound, and this was soon followed by a nasty sanious discharge, with well-marked constitutional disturbance. All this, however, was soon corrected by changing the dressing to a sublimate solution (1 to 2000), with internal administration of a few doses of quinine and iron. Soon all the cap was taken off, thus converting the injured surface into an open granulating wound. The principal dressing afterward was iodoform in vaseline. Everything progressed favorably to the end; professional visits were discontinued on the twentieth day, and the girl soon after resumed her duties. She complained, however, of periodical pain radiating from the seat of injury, and slight ringing in the ears, and dimness of vision. Taking everything into consideration, however, the extent of injury, the absence of suppuration, slight inflammation, continuous healthy granulation, followed by the naked bone being so admirably roofed in by substantial cicatrization, one felt excusable for indulging in a little self-praise, and holding a favorable opinion of the dressings used, sentiments not largely shared in by any of the household; some of them facetiously called the first a "marigold cocktail." But it is not always a calamity to have one's merit measured by other than his own standard, as we are all prone to lose sight of the healing powers of unaided nature.

Lacerated Scalp Wound.

In pioneer-days, before this territory entered Statehood, two drunken miners ended a fight by one receiving a blow across the top of the head with the blade of a steel mining-shovel, which severed the scalp from the skull over a large surface, so that the scalp was found turned over and hanging down the back of the neck. This was my first case in surgery. In the absence of all ordinary appliances, treatment consisted in pulling the scalp back to nearly its old place, where it was successfully retained—thanks to the suggestions and assistance of a common-sense old sailor present—by tying together tufts of the long dirty hair from opposite sides of the approximated edges of the wound. The latter was then covered with compress and bandage, and kept continuously wet with a decoction of black-oak bark for the ensuing two weeks. During this time, the wound was never uncovered or examined. Union must have been immediate, as there never was any discharge or constitutional disturbance. At the end of the two weeks referred to, the whole nasty mass—everything—down to the shaved scalp, was removed, with some difficulty, when everything was found nicely healed, and the patient soon resumed work. Doubtless the tannin in the oak bark acted nicely as an antiseptic healing agent; but the old stager credited his prompt recovery to the amount of whiskey he used—he had always drunk all he could get.

Enforced Consultation.

In response, once, to a call "to come quick," I found that a primipara—a splendid specimen of womanly vigor—had been in labor twenty-four hours, under the care of her father and an old woman. The old man was a sort of preacher-doctor. He said he never got "stuck" before. He, it seems, gave medicine besides relying largely on prayer-cure. The old woman said she had been a midwife "nigh on to thirty year," and this was the first time she had to have the aid of a doctor. Of course, common gallantry prompted the young practitioner to express himself as complimented to be thus associated with two such

veterans! The sufferer was found to have a well-formed roomy pelvis, and there was an ordinary vertex presentation, so the tedious labor had to be charged to "meddlesome midwifery." Everything was soon over, as was announced by lusty crying of the new-comer. Both did well. The mother expressed gratitude for her prompt relief; but the old couple robbed me of all glory by asserting that they had "jest about fetched her around" before my arrival, but they could not agree as to whether it was the result of the old man's prayers or the old woman's last dose of asafetida.

Not long afterward, the old man had an ugly attack of dysentery. He insisted on being his own doctor and going outdoors to pass frequent bloody dejections, till too weak to travel. After consenting to have me called, as soon as he was scared into remaining in a recumbent position and using the bedpan, in a little while his troubles were over. When, however, an effort was made to draw from him some expression of acknowledgment of my humble agency in his prompt relief, his thoughts were found to be running in a different direction, as shown by his saying: "Well, Doc, I didn't think you'd keer, and I had some truck in the house—some 'intment—which I knowed was bound to fetch it; so I jest rubbed some of it on my fundim-e-n-t, and I felt it tech the spot right away. I knowed it was bound to fetch it."

The Medical Witness.

As doctors and lawyers are grouped together by most laymen as a lot of vampires living off the substance and misfortunes of others, those of the two callings ought to stand together in an alliance defensive, if not offensive; and, usually, medical men do feel kindly toward the legal fraternity. The latter have a queer way, however, of reciprocating, as is shown in their promptness to take charge of blackmailing schemes, sometimes called suits for malpractice, and as shown in their treatment of medical witnesses when dragged into court and subjected to raking cross-fire on the witness-stand. There are cases, however, in which the latter procedure is excusable, as when adolescence rushes in where experience is unwilling to go, or in the case of some medical fledgling assuming to be a medical expert, and willingly—yes, gladly—taking the stand, pregnant with the idea that he has important statements to make for the enlightenment of court and jury. But, when he gets through, it is with a change of heart: he knows no one has been enlightened but himself, and he has been forced to expose all his ignorances, and not permitted to tell anything about which he has a lucid idea. Once, when younger than now, it was my fate to figure in some such rôle in a divorce case, in which the wife sued her rich husband for a legal separation and alimony. One of her grievances was that he charged that, at marriage, she had gonorrhœa, with which she infected him. My evidence, given with the earnestness and zeal of one strong in the faith that she was a pure, slandered, wronged woman, was to the effect that, shortly before marriage, she was under my treatment for leucorrhœa, an ailment that even an expert might mistake for gonorrhœa; that a husband cohabiting with a wife thus afflicted might take on non-specific urethritis, and I gave it as my unqualified opinion that such were the conditions in the case pending. Well, she got her divorce, but the presiding judge refused to grant alimony, whether by reason of, or in spite of, my medical testimony that functionary never stated. Not long afterward, one who stood high as a nice moral young man called to see me, a picture of wretchedness and woe. He said there was something seriously wrong with his "private parts," he could not imagine what. Upon examination, an effort was made to relieve his mental anguish by the assurance that he could soon be relieved, as it was only a plain uncomplicated case of old-fashioned clap. This announcement was a shock and surprise. He said it could not be—it was impossible. In total disregard of these protestations, it was suggested that he had better tell where he got it, as such information might have an important bearing on treatment; whereupon, after a little hesitancy, he lifted up his voice and said: "Well, Doc, I never fornicated with but one woman in my life, and never would have touched her had you not given her so excellent a character when a witness in her divorce case." Thus the wretch made me a party to his woes, and, as soon as cured, skipped away into the unknown, after beating me out of my fee.

"Such is (professional) life in the far West."

—There were 377 cases of scarlet fever and 66 deaths in New York City during the week ending August 14; and 709 cases of measles and 59 deaths during the same period.

Society Reports.

OHIO STATE MEDICAL SOCIETY.

FORTY-THIRD ANNUAL SESSION, AT COLUMBUS, JUNE 13, 14, AND 15, 1888.

The President, Dr. S. F. Forbes, in the chair.

Mayor Bruck, of Columbus, delivered an Address of Welcome. He quoted the old saying that "the sun shines on our successes and the earth hides our blunders." The successes, he thought, exceeded the blunders very greatly.

Reports of the Secretary, Treasurer, and various committees were made. Also the reports of the delegates to the American and British Medical Associations.

Report of Delegate to British Medical Association.

Dr. E. S. McKee, of Cincinnati, made his report as delegate to the British Medical Association. He reported his visit one of very great pleasure and instruction. The British Association he found superior to the American in some respects, inferior in a few, and similar in many. Politics play quite as prominent a part in the British as in the American Association, and sectional strifes, he said, were frequent and bitter. The English doctor, as is perfectly natural for an Englishman, thinks himself superior to his Scotch or Irish brother. This shows itself in various ways, among others in the advertisement of various charitable institutions that wish to fill vacancies in their staffs. Their advertisements read to the effect that no Irish or Scotch need apply. This the Irish and Scotch naturally resent. This resentment took the form of a resolution at Dublin, demanding that this practice by English institutions be discontinued, and declaring the qualifications of the physicians of the different divisions of the island to be equal. This produced excited discussion, but, the meeting being held on Irish territory, the resolution was carried through with a cheer. The reports of the various committees on legislation might be thus summed up: "We have done everything possible, and have accomplished nothing." Their efforts in the direction of legislation seem to be about as persistent and fruitless as with us. The endeavors on the part of the committee to secure legal control of the habitual drunkard were especially worthy of notice. The finances of the Association were reported in a solid condition. The British Medical Association now owns its own property on the Strand in London, where are located the permanent headquarters and the office of the journal. The annual income exceeds the expenditures, and a nice remainder is left each year. The membership of the Association includes the members of all the auxiliary societies, and numbers about 12,000, 1200 of whom were present at the Dublin meeting.

Dr. McKee then said: "My time was almost exclusively spent in the Section on Obstetrics and Gynecology, but there was quite an amount of good scientific work done in all the sections. The Section on Obstetrics and Gynecology was highly favored in hearing two papers by Dr. Apostoli, of Paris, on his method of treating fibroid tumors of the uterus and endometritis. He gave a demonstration in the Rotunda Lying-in Hospital, of his method of applying electricity in the treatment of diseases of the uterus. Dr. A. V. Macan, Master of the Rotunda, was President of the section, and, in his fine address, told of the practices and successes in the obstetric art in the long career of this old and famous institution. He made a most excellent executive officer, cutting off the long-winded talker and drawing out the man whose erudition was only equaled by his modesty. Under his command, little time was lost and much work was accomplished. In calling for discussion, he would say: 'Has any gentleman anything *new* to say, *not* simply anything to say?'

"The meeting was accompanied by a grand succession of social entertainments. We were dined and wined, given suppers, garden-parties, soirées, receptions, balls, and sermons. The British far excel us in hospitalities to the visiting medical brethren within their gates. The Ohio State Medical Society may feel itself honored by the manner in which its representative was received by the British Medical Association. My visit was much more pleasant than had I gone there without my papers as delegate from this Society."

Election of Officers.

The election of officers resulted thus: *President*, P. S. Conner, M.D., LL.D., Cincinnati; *First Vice-President*, Dr. D. Halderman, of Columbus; *Second Vice-President*, Dr. B. M. Ricketts, of Cincinnati; *Third Vice-President*, Dr. A. H. Brundage, of Xenia; *Fourth Vice-President*, Dr. H. M. Brown, of Hillsborough; *Secre-*

tary, Dr. G. Collamore, Toledo; *Assistant Secretary*, Dr. E. C. Brush, Zanesville; *Treasurer and Librarian*, Dr. T. W. Jones, of Columbus. Various committees were elected. So much time was consumed in the elections that it was decided, on motion of Dr. Dudley P. Allen, of Cleveland, that in the future the selection of all officers, except the President, will be left to a committee on nominations, consisting of five members.

The number of invitations given made the selection of a place of meeting for next year rather difficult. Put-in-Bay, Columbus, Youngstown, Canton, and Delaware were presented and their respective merits urged by their champions. After much debate, the selection fell to Youngstown.

The Society was entertained by receptions at the residences of Dr. Starling Loving, Dr. J. W. Hamilton, Dr. W. D. Hamilton, and at the Central Ohio Lunatic Asylum, all of which were very enjoyable.

Dr. Dudley P. Allen, of Cleveland, and Dr. A. W. Ridenour, of Massilon, each read papers upon the Radical Cure of Hernia. The former presented two cases operated upon with successful result. Dr. Ridenour discussed the different varieties of hernia and the modes of reduction.

The experiments performed by Prof. Senn at the late meeting of the American Medical Association were repeated by Dr. R. Harvey Reed, of Mansfield. He injected hydrogen gas into the rectum of a dog, and ignited it as it passed from a tube inserted into the esophagus, thus demonstrating the fact that the ileo-cæcal valve is not impassable.

Dr. J. T. Whittaker, of Cincinnati, read a paper upon the

Therapy of Tuberculosis.

He commenced with the statement that five-sevenths of mankind suffer, at one time or other, with tuberculosis; that many have it in some form and recover is proved, he said, by post-mortems. One-seventh of the population of the globe die of one manifestation of this disease—tuberculosis pulmonum. On June 13, twelve persons died of consumption in Cincinnati; others of convulsions, meningitis, and different complaints really tubercular. Koch announced his discovery six years ago, and to-day it remains undisputed. Practical results, he admits, have not yet been obtained from it, however, and pulmonary tuberculosis remains as intractable as ever; but no treatment of this disease is scientific which does not refer to the bacillus. Koch has made the discovery, and it is the duty of clinicians to cure the disease on the basis of the discovery.

The good effects of high altitudes are probably due to increased lung-exercise, as it requires three times as much exercise to breathe at such heights as at the sea-level. Fresh-air gymnastics, as Sydenham said of horseback-riding, bears the bell. Cod-liver oil has done more for consumption than all other therapeutic remedies put together. The food of the highest force-value is alcohol. Alcohol, fresh air, and cod-liver oil are no new remedies in the therapy of tuberculosis.

Boiling for twenty minutes, or corrosive sublimate 1–1000, is necessary to destroy the bacillus of tubercle. Dr. Whittaker then said: "After experimenting for a year, I have reached the conclusion that no inhalation will kill the bacillus, and have entirely abandoned the trial. I have also tried corrosive sublimate by inhalation and by parenchymatous injection without success. I have had a year's experience with creasote, increasing it a drop a day until 25 drops, or even 40, were given daily. Guaiacol has no superiority over creasote. Aline sulphide, the essential principle of garlic, caused more speedy results, but the scent of the garlic was well-nigh unbearable." Dr. Whittaker said he had been experimenting with the oil of black mustard for a month past and had seen some marked improvements, but he thought the time was too short to permit him to speak with authority of this remedy. He hoped some of the gentlemen present would take up the subject and assist him.

Dr. Herrick, of Cleveland, said he did not believe in the germ-theory of tuberculosis; he thought the bacillus was not the cause, but the result, of the disease. The disease is only a disturbed nutrition; we always find an antecedent disturbance of nutrition in tuberculosis. He took issue with Dr. Whittaker as to his ideas in regard to alcohol as a heat-producer in the body.

Dr. W. J. Scott, of Cleveland, said he did not believe that healthy people are liable to contract tuberculosis.

Dr. J. T. Whittaker said: "Dr. Herrick must ignore all cultivation experiments. We can introduce the bacillus of tubercle into the body of a healthy animal and produce tuberculosis. Dyspepsia does occur frequently—in fact, in about one-third of all cases; 90 per cent. show ulcer of the intestinal canal. It is very questionable if tuberculosis is ever inherited. This bacillus is a

stumbling-block to the theory of inheritance. It is a vegetable seed. How can an animal tissue cause a vegetable seed? I think the time is not more than a decade distant when we will throw away the stethoscope and make our diagnosis of tuberculosis by an examination of the sputa alone. It must be made a crime not to disinfect the sputa. A man might as well walk the street, firing a loaded revolver, as expectorating tuberculous sputa right and left."

Dr. P. S. Conner, of Cincinnati, read a paper on

Malpractice Suits.

He was especially qualified to speak, having just passed through a suit. He said that, in the great majority of instances, malpractice suits are brought with the intention to rob, a species of blackmail. So long as rascally lawyers and scoundrelly doctors exist, so long also, he said, will malpractice suits have an existence. There seems to be an epidemic of them in Ohio at present. He then read a bill which is in force in the State of New York to protect physicians, surgeons, dentists, and others from speculative malpractice suits. This bill requires that bonds be given equal to twice the amount claimed as damages, in case the suit be lost or dismissed. With such a law as this on our statute-books, he thought we would have all that was needed. Persons will then, he said, be careful how they bring or encourage malpractice suits. Dr. Conner then presented a resolution, which was adopted, requesting that a special committee be appointed to present to the Legislature, at its next session, a bill similar to the one now on the statute-books of New York.

Dr. W. J. Scott, of Cleveland, reported

Four Cases of Diabetes Mellitus.

They were treated by the diet method recommended by Dr. Pavy at the last International Medical Congress; they were not cured, however.

Dr. B. Merrill Ricketts, of Cincinnati, read a paper on the

Treatment of Acne.

He had found massage sometimes beneficial, especially when it was accompanied with Turkish baths. Iron, arsenic, and strychnia, he said, are serviceable as tonics. One-eighth grain of arsenious acid given with the elixir of gentian, tr. ferri chloridi with a few drops of hydrochloric acid after each meal, gradually increased until one-half or three-quarters grain is taken daily, is by far the best treatment. As an external application, a stimulating paste, composed of ichthyol and mollin, should be applied after all sebaceous matter has been removed with an application of hot water. Resorcin with sub-nitrate of bismuth, zinc oxide and mollin, or lanolin, is also good.

Dr. Wm. T. Corlett, of Cleveland, read a paper on

Diseases of the Skin, due to Defective Alimentation.

He reported a number of cases and described the treatment.

Dr. H. M. Brown, of Hillsborough, read a paper on

Painless Treatment of Rectal Disorders.

His treatment consisted largely in the use of cocaine. His investigations had proved beneficial alike to his patients and himself.

Dr. H. J. Herrick, of Cleveland, read a paper on the

Contagiousness of Disease.

He did not believe much in the germ-theory of disease, especially as it affects consumption.

LEHIGH VALLEY MEDICAL ASSOCIATION.

Eighth Annual Meeting.

The Lehigh Valley Medical Association held its eighth annual session at Paxinosa Inn, near Easton, Pa., on Wednesday, August 15. About seventy physicians, members, with their invited guests, assembled in the parlor of the inn, while their wives and daughters were enjoying the views from the porches or rambling through the chestnut groves near by.

Dr. W. B. Erdman, the retiring President, delivered the President's Address, selecting as his subject "The Character and Objects of the Medical Profession." This he presented largely from the negative side. After speaking of the greatness and dignity of medical practice, he said: "He who enters this profession from merely sordid motives, having failed to recognize the principles on which permanent success therein is founded, will either miss the very end he has aimed at and fall by the wayside, or, abandoning all pretense of regular and honorable conduct in his practice, will be swallowed by the maelstrom of quackery." With this introduction, he gave a study of the natural history of quackery, illustrating with very apt historical allusions. The reason of

success of quackery is due to a want of knowledge on the part of the people, and the influence of novelty and mystery which the "isms" suggest. By thoroughness of preparation, honesty of purpose, and integrity of character, the true physician should aid in dispelling this abnormal condition.

The annual address was delivered by Dr. T. J. Mays, of Philadelphia, upon "The Treatment of Lung Cavities." This topic was selected because of its frequent occurrence, and the prevailing opinion that the cavity is beyond the power of treatment. After giving a clear *résumé* of the pathology of the condition, he advanced to the therapeutical portion of the paper. The cardinal principles must be remembered, (1) that it, as well as the disease of which it forms a part, is inherently a process of necrosis, of mortification; (2) that not only its size, but its existence, depends on the degree of local and constitutional resistance. As a rule, a patient with a quiescent cavity is more desirable for treatment than one who has an infiltrated lung. The special indications for treatment were enumerated, as (1) fever, (2) anorexia, (3) wasting, (4) harassing cough and expectoration, (5) loss of sleep, (6) diarrhœa, (7) hæmoptysis. For the fever, antipyrine was given the first place. Ichthyol, administered through a respirator in a strength of twenty-five per cent. aqueous solution, exercises a beneficial effect on the fever by its effect on the inflammatory process in the lung. Alimentation is all-important, but here the cook is sometimes of more importance than the doctor or nurse in so preparing the food that it will be appetizing. The morning cough will continue until the cavity is emptied. A position on the hands and knees, with the head lowered, will often hasten this. For hæmoptysis, the use of the fluid extracts of hamamelis and geranium—one part of the former to three of the latter, in teaspoonful doses every hour or two, or oftener if necessary—was especially commended. The last item of treatment mentioned was pulmonary gymnastics, which should be employed, and, if with proper precaution, benefit will result.

In the executive session, Dr. George N. Best, of Rosemont, N. J., was elected President. The Executive Board was authorized to arrange a meeting during the winter, to be devoted more especially to the discussion of medical subjects. (The Board afterward determined to hold a meeting in Allentown late in January.)

After adjournment, the Association joined the friends on the porches, they having had a pleasant social time enjoying the beautiful view which the erection of the inn had made accessible. Paxinosa Inn is situated on a hill north of Easton, some six hundred feet above the Delaware River, and affords an extensive view on all sides. The annual dinner of the Association was then served, and, although the members have grown very fastidious because of previous excellent dinners partaken of, all were pleased with the careful selection and proper preparation of the viands served; indeed, before departing, they were loud in their praise of the inn, as to its position, its appointments, its comforts, and its sanitary precautions.

PERISCOPE.

Pneumonia as a Contagious Disease.

In the *Archives générales de Médecine*, July, 1888, Dr. Netter concludes an elaborate paper on the contagiousness of pneumonia. He regards pneumonia as a transmissible contagious disease, and that the contagion owes its activity to specific pathogenic organisms, pneumococci, which multiply in the pneumonic foci and are discharged from the body by the different passages, but are especially abundant in the sputa. He thinks, moreover, that contagion is still possible long after the patient has recovered from the disease. The reasons for this belief are two: first, because the contagious matter resists desiccation, and can preserve its activity outside the human body on the surface of inert bodies to which it adheres; second, because the contagion is not destroyed in the patient after the termination of the pneumonia. Long after the latter—perhaps indefinitely—persons who have recovered still have in their mouths active pneumococci, and it is to the activity of the latter that he thinks we must attribute both the great frequency of relapses and the large number of persons belonging to one family who are often exposed to pneumonia.

Dr. Netter, however, does not believe that rigorous isolation is necessary in pneumonia. He would object to the parents of the patient passing the night in the same room with the sick one, and especially to their sleeping in the same bed. They should be informed, he says, of the necessity of leaving the room from time to time, and of the danger of using linen soiled by the patient.

In hospitals, he says, patients with pneumonia should not be placed in small rooms by themselves, for the contagion is only slightly diffusible. All the published cases

show that contagion has been especially observed in small ill-aired rooms. Patients suffering with typhoid fever, measles, acute diseases of the air-passages, nephritis, and diabetes ought not to be with patients suffering from pneumonia. Hospital life is recognized now as predisposing the most of these diseases to tuberculosis. Dr. Netter believes that this influence can act also in favoring the production of pneumonia.

Inasmuch as the sputum, if not the only, is at least the habitual, vehicle for the contagion, it should be disinfected. Corrosive sublimate has been found efficient for this purpose. He advises that the linen should be subjected to the same disinfecting process as is used for the linen coming from those affected with other contagious diseases. Disinfection of the mouths of patients with pneumonia should by no means be neglected.

Foreign Body in a Woman's Bladder simulating Stone.

At the meeting of the Obstetrical Society of Boston, April 14, 1888, Dr. C. M. Green reported a case of foreign body in a woman's bladder simulating stone. He said that the patient was a young woman of previous good health, who for some time had suffered with frequent and painful micturition. There was almost constant pain through the bladder, which was increased by motion, especially in riding or in walking on uneven surfaces, as in stepping from the sidewalk to a street-crossing. Occasionally particles of gravel were voided, and rarely, minute clots of blood. Examination of the bladder proved very difficult, as the urethra was exquisitely sensitive; but a silver female catheter was passed, and the urine thus obtained found to be alkaline and of strongly ammoniacal odor. On manipulation, the catheter was felt to pass over a gritty mass, which on subsequent bimanual examination appeared to be about the size of a hen's egg. No clink was elicited by the impact of the catheter, but, from the symptoms and other facts mentioned, a diagnosis was made of vesical calculus. After some preliminary treatment, the patient was etherized and a lithotrite passed into the bladder to crush the suspected stone. Repeated attempts failed to enable the operator to grasp the stone, for on closing the lithotrite it seemed to grasp only the bladder wall; finally the operation was abandoned. Thorough washing of the bladder, however, brought away much sand and several small pieces of calcareous substance, and it was decided to wash the bladder daily with a solution of boracic acid and await further developments, in the belief that what had been taken for a stone must be one or more masses of calcareous matter adhering to the bladder wall.

For four days the patient was much better, and daily washings continued to bring away gritty particles. The next day, however, the urine was very offensive and contained blood and mucus; the patient was unable to sleep, on account of pain and vesical tenesmus. It was then decided to dilate the urethra and explore the bladder with the finger. This being done, the suspected stone was found to consist of a soft rubber catheter, coiled up to the size of a hen's egg, and thickly coated with calcareous deposit. This had been caught in the lithotrite and gave the sensation of catching the bladder wall. No incontinence followed the dilatation of the urethra, and the patient made a very satisfactory recovery. She denied all knowledge as to how the catheter came to have been left in her bladder, and expressed great indignation that some doctor should have been so unskilful; but Dr. Green expresses the opinion that the catheter had been used either by herself or by an abortionist for the purpose of interrupting a supposed pregnancy, and had been ignorantly passed into the bladder and lost there.

In discussing Dr. Green's paper, Dr. Elliot spoke of a case in which, having dilated the urethra, he had found calcareous masses plastered over the bladder wall, and had been unable to remove them with the finger. He therefore crushed off the masses with the lithotrite, but had great difficulty in washing out the bladder. He finally found that the evacuator was clogged with pieces of twisted paper, which proved to be fragments of a paper lamplighter. The lamplighter had evidently been passed into the bladder by the patient, and had become the seat of calcareous deposit, and subsequently adhered to the bladder wall.

Dr. Elliot suggested that for purposes of digital examination the female bladder should be empty of urine, as the finger can then palpate the whole surface. In regard to the use of the lithotrite in such cases, he said, the instrument should be held in a perpendicular position, otherwise it hits the uterus.

In the case just mentioned, recovery was speedy and there was no incontinence; he had used, for dilating the urethra, Hank's dilators first, and subsequently the finger.—*Boston Med. and Surg. Journal*, July 12, 1888.

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CHARLES W. DULLES, M.D., EDITOR.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

A FOLLY WHICH IS ALMOST A CRIME.

In the reports which the daily papers give of a camp-meeting held recently near Philadelphia, we read that a certain person, only twenty years old, and known as the "boy missionary," was to be married, on August 15, to a girl of the same age, and soon after to proceed to Africa as a missionary. The boy missionary and his intended wife are both said to be small, and the bridegroom to be delicate. The marriage seems to have been approved by the boy's clerical superiors, and to have aroused no opposition whatever.

We cannot, however, permit the occasion to pass without notice. Medical men have a duty to perform to their fellow-men beyond that of trying to get them well when they are sick. It is quite as much their office to warn their fellow-men of danger to their health and lives, and, if need be, to endeavor to dissuade them from doing what is likely to lead to unfortunate physical results. The case of the boy missionary, therefore, suggests a decided remonstrance against an act of folly which, from the physician's standpoint, is almost a crime. It is bad enough for immature persons to be joined in wedlock; but it is worse when one of two such persons is so frail as to be spoken of as "delicate." Add to this the intention of going to such a country as Africa, and what can medical men think of the prospect? If these young enthusiasts do not lose their lives very soon, what can be expected as the result of their conjugal relations? If they have any progeny, how can this progeny be other than ill-developed and unable to maintain the struggle for existence? This is a question which will rise naturally in the mind of medical men, and which should have been considered by the advisers of this couple. For the young people themselves, we have only pity; but for those whose age should have given them greater wisdom, we have only condemnation. Unfortunately, they have some justification in custom and precedent; and, for this very reason, we seize the present occasion to sound a note of warning.

Unwise marriage is one of the most fruitful sources of deterioration of the human race. Were it not that material prosperity and a continually increasing knowledge of the conditions of health tend to improve the race in this country, we might well fear that our customs in regard to courtship and marriage would soon ruin it. It is for others to speak of the considerations of social and mental fitness for marriage: it is for us, as medical men, to instruct our fellow-men in regard to the conditions of physical fitness. That these conditions are not regarded, as a rule, the slightest observation shows; and the effects of this neglect are known to every practitioner of experience. When, therefore, so conspicuous an

illustration of this neglect is furnished as has provoked these remarks, we believe it is high time for medical men to protest against it, and to state plainly that, from their standpoint, it is a folly which is almost a crime.

MEDICAL EDUCATION.

It is one of the most hopeful signs of the present time that the subject of medical education is attracting a great deal of attention, and that in our own country there is an unmistakable desire to find out and put into operation the best methods for the development of intelligent and successful practitioners of the healing art. A large part of the time of our medical societies is spent nowadays in discussing the plans proposed or followed by different medical schools in educating their students, and the columns of the REPORTER have, of late, frequently borne witness to the zeal of those who are striving to secure the highest efficiency of the schools, and to our own sympathy with the object they have in view. It will be understood, therefore, that we regard with much interest every carefully-considered contribution to this discussion, and think it proper to bring the subject to the notice of our readers again and again.

One of the most important addresses on medical education which has appeared of late was delivered by Dr. Ely Van de Warker before the Section on Obstetrics at the last meeting of the American Medical Association, and is published in the *Journal of the Amer. Med. Association*, August 11, 1888. The title of this Address is "How Gynecology is Taught"; but the author considers much more than his title covers, and his address opens up questions which affect the whole subject of medical education in the United States.

It would be impossible here to indicate all the matters to which Dr. Van de Warker alludes; but we wish to add our endorsement to an objection which he raises against the tendency in some medical schools toward methods of education which are better theoretically than they are practically. Our own acquaintance with the methods of teaching followed in first-class medical schools does not lead us to share his idea that schools with graded courses of study exalt the text-book above the teacher; but we do believe with him that some of the best schools in the country are pursuing a course which tends to produce men who can pass brilliant examinations, rather than men who will be careful observers and shrewd thinkers. The disadvantages of the old seven-branch system of teaching need not be dwelt upon to justify the general opinion of its insufficiency for the requirements of the present day; but we believe that there will be a reaction from the sentiment which in our day would force all the schools in America to a standard of education which exacts so much of students as is indicated by the examination papers of schools like Harvard and the University of Pennsylvania. Such a standard we believe to be suited to only a very few schools, and utterly unsuited to the needs or conditions of most men who purpose entering upon the practice of medicine. Its fault, in our opinion, is that it attempts to cram into every head the wisdom of a whole faculty, and this in a space of time which is totally inadequate for any such purpose. Everyone who studied under the old seven-branch system knows how severe the strain was then upon the diligent student; and now, when the subjects of study are divided and multiplied until it is hard to say how many they are, the strain is well-nigh intolerable; beside this, some of the branches which were once only reasonably hard are pushed nowadays out of all proportion to the real needs of the student. Chemistry furnishes a good illustration of the fact. Once the student was expected to acquire a fair knowledge of physics and of general chemistry, but nowadays he is expected to fit himself to pass an examination which would make his father shudder,

and which would floor every one of his numerous examiners, except the professor of chemistry. So in physiology: the study of organs and tissues, of functions and disturbances, which sufficed for starting the teachers who now oppress him, was as nothing to the burden imposed by the modern experimental physiology, with its indescribable machinery and its wearisome details.

Let it not be supposed that we deprecate thorough study in chemistry or physiology, or that we fail to appreciate the advantage of a refined knowledge of both. But it seems to us that it is a mistake to push a whole class of medical students as if each member of it meant to be a specialist in these branches. This mistake appears the more striking when we look at the way in which anatomy is treated nowadays. The study of anatomy, in graded schools, is usually regarded as ended at the end of the second year. For two years the student gets what he can of anatomy, fighting hard against the exactions of chemistry, physiology, and materia medica, and then he is driven on the so-called practical branches for another year, to the utter exclusion of a branch which ought to be studied as long as he is within college walls.

Then, when we regard the question of modern medical education, and the strain upon students, we must consider the demands of the specialists. The teachers of gynecology, of ophthalmology, of otology, of dermatology, of pædiatrics, of orthopædics, and so on, feel very naturally the importance of giving medical men some preparation for practicing in each of their departments; and all of them are pressing to have their special branches made a part of this regular curriculum. But will human endurance bear the strain? Already the cry comes from some advocates of higher education that we must have an obligatory four-years' course. But it is easy to see that four years will soon be too short a time in which to cover the enlarged field of study, and so may six or ten years be, after a while.

Now, it is easier to make objections than to propose remedies; and we can see the disadvantages of trying to secure too much for and from students of medicine more clearly than we can the way to give them just enough of education to make them useful and contented men. But we believe that the majority of schools which give the degree of doctor of medicine will have to come to a standard which recognizes the fact that there is a limit to the possibilities of the average student, and that the duty of the schools is to give their students a reasonably good start, leaving them to perfect themselves by post-graduate and voluntary study, as their opportunities permit and the conditions under which they are to practice may demand.

How this shall be done is a very large question—too large to be discussed now. What we have said is meant rather to suggest a line of thought than to direct it. We all wish to reach the highest standard of medical education which is attainable; but it is worth while to consider seriously whether or not some of the energy nowadays devoted to securing a higher education is not misdirected and likely to do harm to the good cause in which it is enlisted.

THE RELATION OF PTOMAINES TO POISONOUS FOOD AND TO INFECTIOUS DISEASES.

Everyone who has endeavored to keep abreast of the wonderful advances made in the different departments of medicine within the last two decades has doubtless found his powers of memory and observation severely taxed. The modern system of specialisms, though doubtless fraught with some evils, has at least this advantage—that it enables its followers, by devoting exclusive attention to a single line of research, the more thoroughly to master their subject, and thus elicit new and important facts, which otherwise might escape notice.

We have been forcibly reminded of the

above truth by reference to the modern discovery of the ptomaines, and their elucidation by a number of distinguished scientists, among whom we are glad to place our countryman, Professor Vaughan, of the University of Michigan, the discoverer of one of the most important of these interesting bodies.

We have thought that our readers, some of whom may not have had the opportunity to examine this important subject, would be pleased to have a *résumé* of what appears to have been determined in connection with it.

As is well known, *ptomaines* (from πτῶμα, a dead body) are chemical basic substances, formed during the putrefaction of organic matters—chiefly animal. On account of their resemblance in many respects, both in their chemical and physiological characters, to the vegetable alkaloids, they have been also named *putrefactive alkaloids*.

The poisonous nature of putrid flesh, of certain varieties of mussels, sausages, cheese, and canned articles of food, etc., has long been a matter of experience. These substances, when eaten, frequently occasion most violent, and often fatal, results, resembling the effects of the acrid narcotic poisons —such as vomiting and purging, severe muscular pains, disturbed breathing, headache, stupor, delirium, dilated pupils, difficulty of swallowing, great prostration, convulsions, coma, and death. We read almost daily in the newspapers of such cases occurring after partaking of what were thought to be very innocent articles of food —such as milk, ice-cream, cream-puffs, canned provisions, etc. In these instances, as the symptoms usually resemble, in many respects, those of the ordinary mineral poisons, the search after arsenic, lead, tin, or copper, of course, proves unavailing, because of the absence of all of these last-named substances; the whole trouble has been caused by the presence of one or more of the noxious ptomaines, generated in the subtle process of the decomposition, or spoiling, of the material that had unsuspiciously been used as food.

It is clearly understood that all these noxious articles of food produce their poisonous actions exclusively through the ptomaines, which are true chemical poisons, as much so as morphine, strychnine, atropine, and other recognized poisonous alkaloids. True it is that the putrefaction is the result of bacterial agency; but it has been distinctly proved that the peculiar symptoms are not due to the absorption of the bacilli into the blood, as was once supposed, nor are they dependent on the direct agency of these micro-organisms on any of the organs or tissues of the body, but on the ptomaines resulting from the action of these bacteria upon the highly-organized material. The kind of ptomaine produced will depend on (1) the specific bacterium engaged in its formation; (2) the stage of putrefaction, ptomaines being transition-products, rapidly undergoing transformation; (3) external conditions, as temperature, supply of oxygen, etc. Although many of these products are poisonous, as just mentioned, the majority of them are innocuous.

What is of special interest to the toxicologist in this relation is the curious fact that these poisonous ptomaines bear a very close resemblance, both in their chemical and physiological behavior, to the well-known vegetable alkaloids. For example, several bodies have been isolated from decomposing human flesh, and one from decomposed cornmeal, that gave crystalline precipitates with certain chemical reagents, and yield also the usual color-test of strychnine; some of these also caused tetanic spasms when injected into frogs. Another ptomaine bears some resemblance to morphine, reducing iodic acid, but failing in other tests. Two volatile oily ptomaines have been extracted by different chemists from various kinds of animal putrefactive matters, bearing a considerable likeness to the volatile vegetable alkaloids, nicotine and coniine. And there are still others which exhibit many of the

properties of the well-known mydriatic alkaloids, atropine, duboisine, and hyoscyamine, causing, when injected into animals, dilatation of the pupil, increased action of the heart, and paralysis of the muscles of the intestines. Besides the above, other putrefactive alkaloids might be mentioned, such as bodies resembling digitaline, colchicine, veratrine, etc. Indeed, there would seem to be no limit to the number and variety of these singular compounds, since they are so very unstable and prone to chemical transformations.

The important practical medico-legal inference to be deduced from the foregoing facts is the danger of mistaking one of these ptomaines for one of the vegetable alkaloids in a case of alleged poisoning by the latter. As we have seen, there is quite a remarkable resemblance between the two, both in their chemical reactions and in their physiological properties. Before the discovery of these ptomaines, there was, comparatively speaking, no difficulty for the toxicologist to detect most of the well-known alkaloidal poisons; now, however, there must always be more or less uncertainty in the result of such an investigation, especially if made on a putrefied corpse. At all events, it will behoove the expert to exercise the greater caution in his examination, especially in a capital case, so as to be able *positively* to exclude the presence of any of these interfering ptomaines in his ultimate results, on which he founds his opinion as to the existence or non-existence of the alleged lethal poison in the body of the deceased. And it is very easy to see what a powerful weapon this *doctrine of the ptomaines* furnishes to the skillful counsel for the defense in a criminal trial for alkaloidal poisoning, and how likely he will be to use it before the court and jury to confuse and embarrass, if not completely to break down, the testimony of the experts for the prosecution. But, fortunately for the cause of justice, here as elsewhere truth "will prevail." The resemblance between the ptomaines and alkaloids, although strong, does not amount to an absolute identity. There are certain special points of distinction between the two substances fully appreciated by the skilled toxicologist, which, if he exercise sufficient caution, will enable him to make a satisfactory diagnosis. These points of difference we are not able at present further to notice. They will be found, however, in most of the recent monographs on this subject.

One other fact here deserves attention, namely, that the simultaneous presence of one or more of these ptomaines with one of the vegetable alkaloids, in a dead body, will sometimes have the effect of partially or completely concealing the usual characteristic chemical tests for the last-named poisons. This circumstance may satisfactorily explain the cause of the occasional failure to discover an alkaloidal poison in the dead body.

The relation of ptomaines to infectious diseases opens up a most interesting field for discussion, but our limits only permit a hasty glance at some of the more prominent points.

The bacterial origin of infectious diseases is now almost universally admitted; indeed, the results obtained by following out rigidly the rules laid down by Koch would seem to leave no doubt on this point in a few special diseases, at least. As might be expected, different theories have been broached to explain how these little germs produce the disease after they have gained an entrance into the system. The oldest of these theories referred the cause to the deoxidation of the blood through the direct agency of the bacilli, which were said to be present in immense numbers in that fluid. Another assigned it to the accumulation of these bacilli in the blood-vessels, acting mechanically like emboli, and interfering with the circulation of important organs. Still another supposition was that the micro-organisms destroyed the integrity of the blood-corpuscles, and thus devitalized the blood.

But all these blood-theories have been disproved by numerous investigators, and are now abandoned; and they have given place to what may be termed the chemical theory, which may be briefly formulated thus: Each specific bacillus, acting upon the complex organic material (as in the case of putrefaction), produces therefrom poisonous ptomaines, which are absorbed into the circulation just as ordinary poisons, and produce their peculiar impression upon the centres of life—the heart, lungs, brain, and great nerve-ganglia. It will now be understood that each infectious disease has its own specific pathogenic micro-organism, which, having gained admittance into the body under favorable conditions, grows and multiplies, and, in so doing, elaborates a special ptomaine—a chemical poison—which produces its characteristic effects.

That this is not mere hypothesis is shown by numerous experiments, in which, by pure culture of the different specific bacilli, the various corresponding ptomaines were subsequently procured by chemical processes; and, when these ptomaines were injected into the lower animals, many (though not all) of the symptoms peculiar to the specific disease were exhibited. This has been proved in the case of bacteria of anthrax, tetanus, and typhoid fever, in each of which the pathogenic ptomaine has been extracted, and shown to be active in the subsequent production of the characteristic symptoms in a living animal. It has not yet been verified in all infectious diseases, though the probabilities are in favor of its general application.

Much more might readily be written upon this very interesting subject, did our time and space justify it; but enough has been said to stimulate our readers to a farther pursuit in this line of investigation. It is especially suggestive to the toxicologist and the pathologist, and it should not be the less so to the therapeutist, as it opens up an inviting opportunity for the exhibition of antidotal or antagonistic remedies.

ANTISEPTIC MIDWIFERY IN PRIVATE PRACTICE.

The theory of Semmelweiss, of the nature of puerperal septicæmia, with its modern development and deductions, has obtained general recognition and acceptance The question whether or not antisepsis shall be adopted in private obstetric practice presents itself to the practitioner from several points of view. In the past, sepsis has been much more prevalent and fatal in hospital than in private practice. This is by no means so true at present. Antiseptic midwifery has done much to reduce this disparity; indeed, it is more than probable that puerperal septicæmia is more fatal to-day in private practice than in well-conducted hospitals. If this is true, the practitioner can no longer ignore this question. His patient's interests demand that he shall adopt as perfect a system of antisepsis as circumstances will permit. Practical men are aware that it is impossible to adopt a method that can be carried out in all cases. But it is always possible to practice personal disinfection, and, except among the ignorant, to see that the nurse does the same, before touching the genitals. These simple measures, in addition to the methods of cleanliness practiced among the better classes, would reduce very greatly the occurrence of sepsis. It is usually possible to do more than this, and a simple yet efficient method of antisepsis should be adopted. We know of no systematic method better adapted to use in private practice than that employed at the Philadelphia Lying-in Charity (Reporter, March 31, 1888). We do not believe that the most earnest efforts on the part of the physician will always succeed in preventing sepsis in private practice; nor is it likely that relatively as beneficent results will be obtained in private as in hospital practice, for the reason that neither the patient nor her environment is so absolutely under his control.

Our conservative views are not shared by all, and, owing to the radical position held

by some, this subject has recently assumed importance from a medico-legal aspect. We doubt not that in the near future some practitioner who has been so unfortunate as to lose a patient from puerperal septicæmia will be sued for damages upon the plea of malpractice. In the discussion upon Dr. Adams's paper on "Antiseptic Midwifery," read before the Essex North Dist. Med. Society (*Boston Med. and Surg. Journ.*, March 1, 1888), Prof. Wm. L. Richardson, of the Boston Lying-in Hospital, expressed himself very forcibly on this subject. He considers peritonitis, milk-fever, swelled legs, mammary abscess, sore nipples, pneumonia, or an elevation of temperature above 100° F., during the puerperium, as evidences of septicæmia; and that the physician is responsible if death occurs from any of these causes. He thinks that, should a case go to court, "it will go hard with a physician unless he can succeed in shifting the responsibility on to the nurse." This opinion is partly based on the results of antiseptic midwifery in the Boston Lying-in Hospital, under which there have been nine hundred deliveries without a death from sepsis, while before the antiseptic era the mortality was always high, and it was sometimes necessary to close the hospital. Dr. Jaggard expressed similar views in the discussion of Dr. Hoag's paper on "The Importance of Abdominal Palpation in Obstetrical Diagnosis," read before the Gynecological Society of Chicago (*Amer. Journ. Obstet.*, p. 1210 *et seq.*, Nov., 1887). This subject was also discussed before the Chicago Medico-Legal Society, March 3, 1888.

At this time, it is scarcely necessary to do more than allude to the importance of antiseptic methods to the patient. The present status of this question is of peculiar interest to the physician. He must use antiseptic methods not only for conscience' sake, should he lose a patient from puerperal septicæmia, but that he may be able to justify himself in court, in case of a suit for malpractice.

NEW YORK QUARANTINE.

The defects of the New York Quarantine Station are once more attracting the notice of the country. The last demonstration of the way in which it is managed consisted in the death of two men from yellow fever, in a Cuban vessel, while it was lying unsuspected at a dock in Brooklyn, after it had been passed through the hands of the Health Officer.

Such an occurrence as this adds renewed force to what we have before said of the necessity that the General Government shall take charge of the quarantine of the whole coast, and not leave it to each State to manage or neglect, as may happen. When the most important port in the United States gets itself into notoriety for the carelessness with which it guards against the invasion of disease by means of ships, it is high time that the regulation of the quarantine of that port, at least, should be taken out of its hands and confided to more faithful or more competent ones.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

CHEMICAL PROBLEMS. By J. P. Grabfield, Ph.D., and P. S. Burns, B.S., Massachusetts Institute of Technology, Boston, Mass. Small 8vo, pp. 87. Boston: D. C. Heath & Co., 1888.

This little book contains no preface and no explanation why it was prepared. It is to be inferred, however, that it was intended to be used as a guide to work in chemistry in the Massachusetts Institute of Technology and elsewhere, if deemed suitable to instructors in this branch of science. Those who need such works will judge its merits for themselves. To us, it appears to be a capital book, and well suited to furnish an outline of a course of study in chemistry for those who have already become familiar with its elementary details. It is not a book for neophytes, by a great deal, and it makes one who learned what he did of chemistry in the old-fashioned way tremble to read the questions contained in the examination-papers here published.

Happily for those who shall use this book, it is admirably written; the statements made are clear and succinct, and the plan pursued is logical and interesting. We have no doubt that the book will serve a useful purpose, and contribute to the reputation of its authors. Its mechanical execution is very creditable to the publishers—paper, printing, and binding being excellent

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

The Results of Laparotomy for Acute Intestinal Obstruction. By B. Farquhar Curtis, M.D., New York. From the *Transactions of the Med. Soc. of the State of New York* for 1888. 24 pages.

Are Dipsomania, Kleptomania, Pyromania, Etc., Valid Forms of Mental Disease? By Orpheus Everts, M.D., Cincinnati. 8 pages.

Annual Report of the Superintendent of the Cincinnati Sanitarium for the Year Ending November 30, 1887.

The Trituration of Alkaloids. By Edward Pynchon, M.D., Chicago. From the *Western Medical Reporter*, May, 1888. 8 pages.

Etiology of Typhoid Fever, as Observed in Country Practice. By L. N. Davis, M.D., Farmland, Ind. From the *Journal of the Amer. Med. Association*, April 21, 1888. 8 pages.

—Dr. Curtis has analyzed and studied the results of laparotomy performed for the relief of intestinal obstruction in 328 cases, and gives in his pamphlet the details of his analysis and the conclusions to which his study has led him. These conclusions are identical with those of other surgeons who have given much attention to the subject, namely, that the high death-rate—58 per cent.—is attributable largely to delay in operating, and the consequent bad condition of the patients; and that early and rapid operations would probably reduce the death-rate materially.

We can strongly recommend his paper to the consideration of our readers, and especially to those who do not practice surgery, since the responsibility for the result of an acute obstruction of the bowels usually rests with them.

In conclusion, it is pleasant to note the admirable literary style of this pamphlet, in which we have noticed only one thing to which we would take exception: the use of the pronoun "we" for "I."

—In opening a discussion on this question, before the Association of Medical Superintendents of American Institutions for the Insane, at Detroit, in June, 1887, Dr. Everts stated his opinion that an uncontrollable impulse to use stimulants, to steal, to burn, etc., does not develop independently of other evidences of insanity. From the observations of an extensive experience, and a purely scientific study of the subject, he believes that these morbid tendencies are usually associated with other evidences of perverted mental action, which leave no doubt as to the diagnosis; and that, when they are not so associated, great care should be exercised in classifying them.

This view appears to us to be entirely sound, and we believe that a proper appreciation of it, as explained by Dr. Everts, would be of great value in correcting a tendency, which was strikingly exemplified in the late Dr. Beard, to confuse the study of insanity by the use of terms which are misleading to those who are not aware of their proper restrictions.

—In this report Dr. Everts states that, out of two hundred and forty-four patients treated during the year, ninety-five were discharged cured, forty-two improved, and thirty-two unimproved; while six died, and sixty-nine remained under treatment. This interesting statement is followed up by further statistics, and by explanations which bear unusual marks of candor and courage. As a whole, the report is exceedingly creditable to the management of this institution, and the superintendent may well be congratulated upon it.

—Dr. Pynchon is a firm believer in the advantage of preferring the use of alkaloids to that of crude drugs in the treatment of disease, partly on the score of scientific exactness, and partly because it facilitates the dispensing of drugs directly by physicians instead of calling in the pharmacist as an intermediary between him and the patient. In his pamphlet, he states very forcibly the reasons which lead him to his belief, and proposes the plan of triturating various alkaloids with sugar-of-milk in such proportions that three grains of the mass shall contain an average adult dose. His plan is similar to that adopted by certain manufacturing chemists, and has much to commend it. Even more might be said than he has said in its favor; but he says enough to show that it deserves the careful attention of medical men, and especially of those who practice in small towns and rural districts.

—Dr. Davis, in this pamphlet, makes a very valuable contribution to the study of the etiology of typhoid fever. It is true, he raises questions to which he can give no answer; but he does give a very clear and intelligent description of the circumstances of a series of connected cases of typhoid fever, which seem to exclude a factor to which the greatest importance is usually attributed, and to emphasize the danger of another which is generally regarded as of less moment. Dr. Davis is evidently not carried away by the germ-theory of the origin of typhoid fever, and but little disposed to the short and easy way of accounting for its occurrence which too many medical men adopt.

We call especial attention to his paper, because it may serve as a model to many men whose opportunities of observation are large, but whose inclination to write is small. Such carefully studied cases as he has put on record in this paper are of the greatest value, and we wish there were more of them.

Literary Notes.

The magazine called *Woman* has passed into its second volume, with steady improvement in its literary contents. The number for June contains a very good paper by Charles Richards Dodge, entitled "Hints on Physical Culture for Our Girls," well illustrated, and calculated to be useful. Another interesting feature of this number, to which attention may be called, is the department called "Helps and Hints for Mothers." The whole is full of instruction and entertainment. Some of the advertisements will not be approved by medical men, but the inside pages are admirable.

The name of the *Canada Medical and Surgical Journal* has been *changed* to the *Montreal Medical Journal*. It has been enlarged in size from sixty-four to eighty pages, and the subscription reduced to $2.00 per annum.

Dr. Matthew Woods's book, descriptive of the art and literary centres of the Old World, from London to Rome, by way of the Rhine, with incidents by the way, is now ready for the press, awaiting only the work of the illustrators.

CORRESPONDENCE.

Management of the New-Born Child.

TO THE EDITOR.

Sir: Having read with interest the article from the pen of Dr. Ady in the REPORTER of July 28, 1888, and knowing that nothing is more gratifying to a writer than friendly criticism, I will devote a few thoughts to the article in question. Dr. Ady is not alone in his notion that he has peculiar ideas about the management of the new-born infant; careful reading of his article would lead anyone to the same opinion. At first sight the discarding of a woolen for a *canton* flannel slip (for canton, not cotton, is evidently meant) seems plausible, were it not that hundreds of years of experience bear testimony that wool warms and stimulates the newly-born in various ways, not the least important of which is the very irritation of which Dr. Ady complains.

I personally know of many robust young men and women, who to my personal knowledge kicked their toes for the first time against the woolen petticoat. *Light* dressing is certainly commendable, and his custom as to diaper and slip, depending on other wraps for warmth, is a good one, excepting the want of a band, of which more anon. His theory as regards the cord is not so good. If there is danger of blood oozing, which I doubt, would it not be much better to leave enough cord to tie again in case of such accident? Why not follow nature's plan, and leave enough cord to contract from exposure to the air, and thus prevent hemorrhage? Sepsis, as well as hemorrhage, is at a minimum. I have in my mind a careful old gentleman, dead now, who, in a country practice of 22 years, tied cords in 1140 cases, always 3 or 4 inches from the body, enclosing them in a greased cloth, never having had any trouble with the cord in that time. In my own case, I have never had either hemorrhage from the cord after tying it, or ulceration, but once, and that in a scrofulous child.

Dr. Ady's habit of not binding the abdomen has more of barbarism in it than the use of the belly-band has. The laparotomist teaches that the abdomen must be steadied by a bandage after any disturbance has been made of its contents. At the umbilicus there is pregnant cause for trouble, unless it is held in quietude by a bandage. Dr. Ady will admit the neat figure of our own Indian tribes who bind the children, abdomen and all, in infancy, while the pot-bellied native African, who runs like a partridge almost from birth, may be a sample of the doctor's enlightenment. In his first fifteen years, he lost two from bleeding at the cord, several from hernia, but he does not state the kind. Having become wiser, he discards bandages, woolen slips, and ligatures, and comes up smiling with a bare umbilical rupture in 20 years. So in 35 years he has 2 dead babies from hemorrhage, one umbilical rupture, several other ruptures, and nothing else. This is a good showing; but how many physicians with belly-band, old fashioned ligature, and comfortable woolen clothing can make just as good if not a better showing? Their name is Legion. No, Brother Ady, you must give better reasons why the baby should not be kept warm, why the cord should not be tied a few inches from the abdomen, and lastly, why its abdomen should not be supported until the cord has dropped off, the umbilicus healed, and the abdominal parietes accustomed to their changed relations.

Yours truly,

JAMES BATES, M.D.

Alliance, O.,
August 13, 1888.

More About Snake-Bite.

TO THE EDITOR.

Sir: Dr. S. A. Kemp, of Callicoon Depot, N. Y., is a good doctor, but very bashful. He has called my attention to a case, in his practice, of snake-bite cured by poultices of indigo and salt to the wound, together with the internal use of the leaves of the blue violet (*V. sagittata*), and he asks me to report this to you, because he dreads to approach the editorial throne. I take pleasure in doing so. The remedy is an old one, and may, doubtless, be good in certain cases; but I know it to have failed in our own State. Apropos of the subject, the letter from Dr. Milner, in the REPORTER which contained mine, was curious, as exactly reversing the opinion held by myself. Now, with all due deference to the doctor, I differ from his view, holding that the *acidity* of the virus of serpents, which he dreads, is not the toxic principle; hence alkalies, *per se*, are useless. The venom is an *arterial and nerve depressant*, and we require, therefore, a *stimulant* as an antidote. We administer freely nitro-muriatic acid with impunity, although it is more than a hundred times more acid than snake-virus. It does not, however, contain any special toxic principle; and I may say, in passing, that a specimen shown me of the isolated

crystal, stated to be the poison itself from the crotalidæ, was not acid in reaction; it was deemed an alkaloid. Permanganate of potassium is not strongly alkaline, neither is bromine as found in Bibron's antidote. Aromatic spirits of ammonia is too fugacious, and it also is not a violent alkali. Deaths from snake-bite are invariably the result of profound depression, not paralytic in effect. Dr. Milner is right in giving digitalis, but where his emetic comes in as eliminating or modifying a poison injected directly into the circulation goes beyond my comprehension.

I do not see the force of his analogy between strychnia and serpent-venom, nor the necessity for its introduction. The dose of strychnia administered by a physician is known, but the snake don't invite confidence; he gives the largest available quantity, and leaves no memoranda. We must, so to speak, feel our way. Any poison must be neutralized instantly when presented through a wound at the point of entrance. Once distributed through the circulation, we cannot saturate the blood-mass with specific antidotes; as, for example, alkali *versus* acid, or *vice versâ*. We must, then, combat the *effect* of the poison on the blood, the nervous system, the respiration, etc., as indications demand. Fatal snake-bites are comparatively rare, but experience has overwhelmingly shown that strong and prompt stimulation is demanded and is uniformly successful, whilst chemical experiments frequently fail. Indigo has, I know, experimentally been useful, but it was instantly applied. So have many other agents. When we have to deal with an absorbed poison, fully active, then we must treat upon foundation principles. The mild acid in snake-venom does not appear to be the lethal agent, hence we must look out for not only alkalinity (which is perfectly proper and can do no harm in moderation), but aim to reinforce the vital power during the period of prostration by such agents as we know will tide the patient over. The virus liquefies the blood strongly in fatal cases. Be it remembered that alkalies have the same effect in large doses or when long continued.

Yours truly,

W. R. D. Blackwood, M.D.

Philadelphia,
August 7, 1888.

—In October, 1888, an Italian Congress of Hydrology and Climatology will assemble at Bologna, under the presidency of Professor Murri.

Notes and Comments.

American Dentists in London.

A cable-dispatch to the *N. Y. Evening Post*, August 15, 1888, says that the proceedings against Drs. Huntley and Coe, two American dentists practicing in London, bring to light a curious hardship of certain Americans belonging to their profession. Until a few years ago, anybody could practice in England as a dentist. But Parliament passed an act in 1878 instituting a system of examination and registration. Under this, certain foreign diplomas are recognized, but, in the case of Americans, only those of Harvard and the Michigan schools. Drs. Huntley and Coe had diplomas of Pennsylvania and Boston schools. The British Dental Association, taking advantage of the wording of the act, summoned them to a police court yesterday for practicing without qualification. Mr. Waddy, an eminent Queen's counsel who appeared for the defendants, urged with much good sense that the act was never intended to exclude properly qualified men. The magistrate reserved decision. It is quite likely the act will have to be amended. Serious injustice is being done meantime.

Conversion of Mercuric Chloride into Calomel.

The conversion of mercuric chloride into the mercurous salt (calomel) in compound syrup of sarsaparilla was the subject of a paper read before the Indiana Pharmaceutical Association by Samuel Kennedy, of Shelbyville. The addition of 4 grains of corrosive sublimate, free from mercuric chloride, to two fluid ounces of the compound syrup of sarsaparilla, as well as to the same quantity of a watery infusion of each of the drugs entering into the composition of the syrup, showed, after standing ten days, considerable variously colored precipitates, and, upon testing, the presence of calomel was determined. With the addition of 12 grains of the mercuric chloride to the same quantity of similar specimens, the reduction into mercurous chloride was still more marked; but it was greatly retarded by the addition of an equal quantity of salt. Sodium chloride seems to facilitate the solution of the mercuric chloride, and the author thinks it advisable to add it in equal proportion to such mixtures.—*Western Druggist*, July, 1888.

Leprosy in Chicago.

August Johnson, a Dane, aged 21 years, was admitted to the County Hospital at Chicago on August 16, suffering from tubercular leprosy. Johnson came to this country when three years old, and enjoyed good health until eight months ago, when the loathsome disease appeared in the form of a small red blotch on his right loin. He is now covered with tubercles. The origin of the disease is a mystery to the Chicago physicians.

American Climatological Association.

The fifth annual meeting will be held in the Grand Army building, Pennsylvania Avenue between Fourteenth and Fifteenth Streets, N. W., Washington, D. C., September 18, 19, and 20, 1888, in connection with the Congress of American Physicians and Surgeons. The following is the official programme:

Tuesday, September 18, afternoon session, 2.30 o'clock: The President's Address, Dr. A. L. Loomis, New York. After this, the following papers will be read: A Study of the Climate of Colorado as Applied to the Arrest and Cure of Pulmonary Disease, by Dr. S. A. Fisk, Denver; Invalids Suited for Treatment at Colorado Springs, by Dr. S. E. Solly, Colorado Springs; Is Climate an Etiological Factor in Graves's Disease? by Dr. R. G. Curtin, Philadelphia; Health-Resorts *vs.* Institutions, for the Treatment of Pulmonary Consumption, by Dr. P. H. Kretzschmar, Brooklyn.

Evening session with Congress: Papers on Intestinal Obstruction in its Medical and Surgical Relations will be read by Dr. Reginald H. Fitz, Boston, and Dr. Nicholas Senn, Chicago, Ill.

Wednesday, September 19, morning session, 10 o'clock: The Influence of Semi-Tropical Latitudes on Types of Diseases, by Dr. John Guitéras, Charleston.

The discussion on The Relative Importance of Different Climatic Elements in the Treatment of Phthisis will be opened by Dr. E. T. Bruen, Philadelphia, and Dr. V. Y. Bowditch, Boston; Indications and Contra-Indications for Altitude in Treatment of Phthisis, by Dr. F. I. Knight, Boston; An Environment Experiment Repeated, by Dr. E. L. Trudeau, Saranac Lake; An Epidemic of Cerebro-Spinal Meningitis in Central New York, by Dr. W. T. Ford, Utica; The Physiology of Respiration in High Altitudes, by Dr. F. Donaldson, Jr., Baltimore.

Afternoon session, 2.30 o'clock: Report of the Committee on Mineral Springs, by Dr. C. C. Rice, New York, the Chairman; Therapeutic Value of Mineral Waters: In Gastro-Hepatic Diseases, by Dr. Wm. Pepper, Philadelphia; In Urinary and Arthritic Diseases, by Dr. A. H. Smith, New York; In Malarial Diseases, by Dr. W. C. Van Bibber, Baltimore. The Therapy of Ocean Climate, by Dr. A. L. Gihon, U. S. N. A banquet will be given at 6.30 P.M. Members may send their names to Dr. Bosworth, 26 West 46th Street, New York.

Evening session with Congress: Papers on Cerebral Localization in its Practical Relations will be read by Dr. Chas. K. Mills, Philadelphia, and Dr. Roswell Park, Buffalo.

Thursday, September 20, morning session, 10 o'clock: Conditions which Tend to Render the Atmosphere of a Locality Aseptic, by Dr. J. T. Whittaker, Cincinnati. The discussion on The Relation of the Nasal and Neurotic Factors in the Etiology of Asthma will be opened by Dr. Frank Bosworth, New York, and Dr. E. L. Shurly, Detroit; Climate and Bright's Disease, by Dr. J. C. Wilson, Philadelphia; Therapeutic Differences of Mountain and Sea Air, by Dr. W. H. Geddings, Aiken; Climatic Characteristics of Texas, by Dr. Morse K. Taylor, U. S. A.; Climatic Characteristics of Roan Mountain, East Tennessee, by Dr. C. Y. Kenworthy, Jacksonville; Weak Hearts as Affected by Climate and Temperature, Dr. J. J. Levick, Philadelphia; Temperature and Relative Humidity, and their Relation to Health and Disease, by Dr. J. M. Anders, Philadelphia.

Afternoon session, 2 P.M.: The first part of this session will be devoted to business.

Interpleural Pathological Products: their Cause, Significance, and Specific Relationship to Pulmonary Phthisis, by Dr. J. R. Leaming, New York; The Management of Phthisical Patients Undergoing Climatic Treatment, by Dr. I. H. Platt, Lakewood; Further Contribution to the Study of Consumption among the Indians, by Dr. W. Matthews, U. S. A.; Observations on the Use of Terebene, by Dr. D. M. Cammann, New York; Notes of a Summer in Switzerland, by Dr. D. B. St. John Roosa, New York; The Climate of Colorado, by Dr. W. A. Jayne, Georgetown, Col.

Evening session: Address of President of the Congress, Dr. J. S. Billings, U. S. A., after which there will be a general reception in the Army Medical Museum Building.

NEWS.

—Black measles of a most virulent type is said to have broken out among the negroes on the rice plantations on Santee River, S. C. Fifty deaths have already occurred.

—On August 20, M. Pasteur read before the Academy of Sciences a letter from Dr. Gamaleia, of Odessa, announcing the discovery of cholera vaccine. The announcement was favorably received.

—Up to August 27 there have been about 115 cases of a disease which local physicians call "typhoid malaria" in Bristol, Rhode Island, and about 12 deaths. The cause of the epidemic is said to be due to impure milk and water and a defective sewage-system.

—Surgeon General Hamilton has directed Dr. Stratton to inspect the trains between Washington and Alexandria, and to examine the tickets in order to discover all passengers coming from the fever-infected points intending to stop over in Washington. Such persons will be closely watched. It is not intended to quarantine the city, but to keep a lookout for refugees.

—The number of deaths in Philadelphia for the week ending August 25 was 454, which was an increase of 15 over the previous week, and of 36 over the corresponding period of 1887. Of this number, 143 were children under one year of age, and 210 were adults, and 244 minors. Of this number, there were 44 from cholera infantum and 41 from typhoid fever.

—The Marine Hospital Bureau is informed that there are now under treatment at Jacksonville, Florida, 62 cases of yellow fever. There have been 107 cases up to August 27. The deaths have numbered 17; discharged cured, 28; still under treatment, 62. Many of those under treatment are convalescing. A death from yellow fever is reported at Fernandina, and the bureau has authorized the mayor of Savannah to send an inspector to that place.

—In connection with our editorial on the Morris Plains Asylum, REPORTER, July 28, it may be of interest to our readers to learn that Dr. Edward C. Booth, who has been Medical Director of the New Jersey State Asylum for the Insane, at Morristown, has resigned. He states, in his letter to the Board, that he is constrained to this action by inability to effect needed reforms in the medical department of the asylum, owing to the opposition of the warden and certain members of the Board.

HUMOR.

BILL NYE, THE HUMORIST, sent the following brief dispatch in reply to an invitation to attend the recent banquet of the Indiana State Medical Society: "Sorry I cannot be there. May you and your associates continue to *take life* easily, as heretofore."

PAY YOUR SUBSCRIPTION.—An exchange relates this parable: "A revivalist requested all in the congregation who paid their debts to rise. The rising was general. After they had taken their seats, a call was made for those who did not pay their debts, and one solitary individual arose and explained that he was an editor and could not pay because all the rest of the congregation were owing him their subscription to his paper."

METROPOLITAN EDITOR: Think you need change and rest, eh? Well, I shouldn't wonder; city life is a hard one, taking it all the year round, and I believe it is several years since you had a vacation. Which do you most enjoy: seashore, mountains, or pastoral scenes? Hard-worked Reporter (with enthusiasm): Oh, the mountains, always. Editor: Well, the Mind and Matter Association will hold its sixteen-hour-a-day metaphysical sessions at the Bleak Top this year, and you can go there and report them. Don't miss anything, and keep each day's essays down to six or eight columns. The paper has a bill against the hotel-keeper at Bleak Top for advertising. I will charge it to your account and let you take it along. Just before leaving, hand him the bill in payment for your board; but be careful and do it politely, because he's a retired prize-fighter and the wickedest man east of San Francisco.—*Omaha World.*

OBITUARY.

JOHN MILLER, M.D.

Dr. John Miller, of Andover, N. J., died August 8. He was seventy-two years old, and was graduated from the College of Physicians and Surgeons, New York, in 1846.

JOHN F. MURPHY, M.D.

Dr. John F. Murphy died in New York City, August 12. He was a graduate of the Georgetown Medical College, of the class of 1873.

THOMAS J. GALLAGHER, M.D.

Dr. Thomas J. Gallagher, a prominent physician of Pittsburgh, who was graduated from the University of Pennsylvania in 1849, died August 21, aged sixty-six years.

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COMMUNICATIONS.

NASAL POLYPI.

BY G. ARCHIE STOCKWELL, M.D., F.Z.S.,
PORT HURON, MICHIGAN.

Properly, the term "nasal polypi" is employed to describe myxomata or mucous tumors found within the nasal fossæ. By "nasal fossæ," are understood the two chambers, separated by a septum, limited in front by the so-called "anterior nares" or openings of the nose, and at the back by the "posterior nares" or openings into the upper pharynx and naso-pharynx at the posterior border of the septum.

Almost all tumors found within the naso-pharyngeal cavity proper are fibrous or fibro-mucous polypi, having a structure more or less dense and hard; and the great majority of growths found in the nasal cavities are mucous polypi. Papillomata, enchondromata, osteomata, and other tumors of the nose are exceedingly rare, and consequently do not require to be commented upon in this connection.

The term nasal polypi indicates: (1) The habitat of the tumor; (2) the fanciful resemblance of it to the group of radiates or zoophytes peculiar to the animal kingdom that bear the title of *polyps*.

These growths vary in size from a small pea to a marble or larger, and are generally attached by pedicles, though sometimes they are also found of sessile nature. In the main, too, they are more or less pear-shaped; or, as Dr. Markham expresses it, resemble in form, color, and consistency the "expressed pulp of the grape." Sometimes, however, very odd and irregular shapes are assumed, more especially when two or more coalesce at an early stage of their existence, ultimately developing as a single growth. The last kind, nevertheless, is of somewhat rare occurrence.

The bony walls of the nasal cavities and naso-pharynx are lined with a fibrous layer which has all the functions of periosteum, the superficial stratum alone being mucous. The former is thicker and more fibrous at the base of the skull, in the upper part of the naso-pharynx; consequently the origin of fibromata generally is there. In the vault of the nasal cavities, where the termini of the olfactory nerves are spread out, this membrane is thin; upon the septum, and also the floor of the nasal passages, the membrane is not of marked thickness or development; consequently, neither of the places is often the seat of polypi.

The mucous membrane covering the turbinated bones, especially the middle turbinated, and the meatus which they overhang, is decidedly thickened and vascular, and here acinous glands are abundant. Beneath the superficial layer of mucous membrane is found connective tissue. Upon the surface epithelium are *cilia*, which vibrate toward the posterior nares and serve as strainers for respired air. Here, again, where the mucous membrane is thick and vascular, is found the source of nearly all mucous polypi, and, like all such growths, they partake of the character of the material from which they spring.

Regarding the histology of these growths, Leiter remarks: "They are localized hypertrophies of mucous membrane which has undergone myxomatous degeneration"; a statement echoed by Hartmann. Billroth says they retain the elements of the mucous

membrane from which they spring, the glandular element sometimes predominating, sometimes the connective-tissue element. Gross employs nearly the same words as Leiter. Lefferts corroborates these statements in the following words: "They are enlargements of the acinous (grape-like) glands, with attendant hypertrophy of submucous tissues, and covering mucous membrane with serous infiltration, so that the membrane is pushed or drawn out by the gradual increase of the growth—in other words, localized hypertrophy."

Regarding the site of polypi, careful examination of the statistics and observations of various writers reveals the following: 1. Growths of this character positively never arise from the vault or floor of the nasal cavities. 2. They are of extremely rare occurrence in connection with the nasal septum. 3. Are seldom or rarely connected with the inferior turbinated bone. 4. Generally are from the superior meatus, middle turbinated bone, and middle meatus.

The first statement is based upon the fact that careful examination of voluminous (periodical as well as text-book) literature of the past half-century fails to reveal a single case. This is of especial interest in connection with the causes which produce them, of which more further on.

Of the second, authors are generally reserved in opinion; but the discovery of seven cases recorded is evidence of the possibility of such occurrence.

Of the three last, the middle meatus is the region most frequently infested. But, before citing further evidence in this connection, permit me to call attention to a few essential facts:

It must be remembered the middle meatus is situate beneath the overhang of the middle turbinated bone, and that in this meatus is found the gap or opening known as the *hiatus semilunaris:* that into this hiatus the maxillary sinus has its outlet, as have also, through the infundibulum, the frontal sinuses and inferior cells of the ethmoid. In other words, very nearly (or perhaps quite) nine-tenths the area of the air-spaces or cavities surrounding the nasal passages opens into this middle meatus.

Zuckerkandl, in thirty-nine autopsies, determined the nasal fossæ as the exact seat of forty-two polypoid growths or series of growths. Of these, 14 originated at the edge of the *hiatus semilunaris;* 8 at the outlets of the cavities opening into the *hiatus;* 10 in the middle meatus proper; and 4 from the middle turbinated bone. In short, 85.7 per cent. originated in the region of the middle meatus or middle turbinated bone.

Polypi, when found attached to the nasal septum, an exceedingly rare occurrence, as before remarked, are almost invariably adherent to the posterior portion thereof, and in the erectile-tissue area so ably described and demonstrated by Professor Bigelow, of Harvard, within the past decade.

The period of life during which nasal polypi appear is generally given as between the ages of sixteen and seventy. Regarding the latter, I may be permitted to express some doubt, since senility is not favorable to such growths, and, when discovered, they are probably of some years' standing. As regards the former, Dr. Ingalls, of Chicago, records a case in which the polypi originated in the thirteenth year; Morell Mackenzie, giving the statistics of two hundred cases, never encountered a polypus in individuals under sixteen years of age; Bosworth reports two cases in adolescents, however, one eleven years old, the other fifteen years old; and Mason reports one at twelve years.

Strangely enough, the first case that came under personal observation was that of a German lad in his fourteenth year; and the first presented to my brother, Dr. Charles Bliss Stockwell, was that of a boy only eleven years and three months old, and the attention of the parents was called to the growth by the fact it was about protruding from the anterior nares. Neither of us has since observed a case in a person of less than eighteen years of age.

As to sex, careful comparison of statistics reveals that males are much more prone to the disease than females, the proportion being sixty-seven per cent. in favor of the former.

Again, with regard to frequency of occurrence. Zuckerkandl—who, so far as I am aware, is the only person who has manifested sufficient interest in the pathology of nasal polypi to undertake autopsies with the especial view of adding to our stock of information regarding such growths—declares that he found polypi in an average of one of every eight post-mortems.

Almost invariably nasal polypi appear in clusters and in both fossæ: authors universally unite in the declaration that a single polypus is of such rare occurrence as to be almost phenomenal, and I know of no reason for combating or criticizing the statement.

In reviewing the character of polypi, and their effects as produced upon the human economy, it is discovered their relations are

of more especial interest to general practitioners than is perhaps often surmised, and for the following reasons: 1. All nasal polypi possess hygromic or hygroscopic characteristics, by which they absorb moisture in damp atmospheres, and give it off again in dry weather. Swollen by respiratory gases saturated with moisture, if possible they more tightly cork or occlude the chief chamber of the nasal apparatus, and the openings of cavities adjacent thereto. In this way an existing discomfort is increased. 2. The presence of polypi, by the irritation produced, induces greater or less secretion of mucus, according to circumstances. 3. By closing the nasal passages, they prevent mucus from passing back to the pharynx, as nature intended it should, giving a backward dip to the floor of the nasal fossæ, and a downward and backward inclination to the turbinated bones. 4. Air, in its passage to the lungs, instead of being warmed by the radiating vascular turbinated plates, is, owing to obstruction afforded by polypi, forced to seek ingress by the mouth. By this means, the lungs receive respiratory gases at a lower temperature than is proper, and such as, moreover, are improperly filtered, which is never the case where the nasal passages remain unobstructed Here we see the reason why, with certain diseases of the nasal passages and upper pharynx, pulmonary involvement so frequently appears as a sequel.

The connection between nasal polypi and asthma is oftentimes very intimate, as has been ably demonstrated by Voltolimi and Joal; indeed, the latter is not infrequently wholly dependent upon the former. And here permit me a suggestion in passing:

Note how frequently, at times, an asthmatic attack disappears when relief is obtained from a coryza; or how a case of bronchitis is relieved by removing some cause which has the effect of obstructing the nasal passages. Mark, too, how readily a paroxysm of "hay-asthma" yields when the puffiness and irritability of the erectile tissue of the posterior portion of the nose are remedied—quieted, for instance, by a spray of volatile oil of eucalyptus or solution of erythroxylo-caffeina, permitting the air once more to find its way by the natural passage to the lungs! When the mechanical obstruction is removed, the wheezing and inharmonious rasping of the bronchi quickly cease; and in many, perhaps a majority, of the cases, the asthmatic groanings and creakings are cries for nasal relief. The asthma itself may be produced as the sequel of mechanical obstruction, or merely an irritation derived from reflex cause.

Polypi may, and often do, so obstruct the lachrymal duct by pressure, as to cause flooding of the eyes, and this may be the first indication of their existence. Again, headache is induced, the severity of which depends upon like or similar causes, and is manifested by drooping lids and dull and suffused eyes: here there is a closing of the infundibulum or ostium frontale, preventing proper ventilation of the frontal sinuses. The frontal headache attendant upon so-called "cold in the head" is of this class, regardless of the presence of actual polypi, and may often be relieved by the use of Politzer's air-bag, employed in the same manner as in inflation of the middle ear through the posterior pharynx and Eustachian tube: the ventilation of the frontal sinus relieves congestion which has resulted upon temporary closure of the openings. Persistent cough, too, is frequently a condition or symptom, relieved by the removal of polypi which, alone or by their secretions, cause tickling of the posterior pharynx, and induce thickening of the palatine tissues. Sneezing is oftentimes another indication of the presence of such growths, bearing in mind, however, the application of the old saw: "All rabbits are hares, but all hares are by no means rabbits."

It is even possible for polypi to cause marked disfigurement of the nose and face, though, happily, this is rare. This is true of the German boy before noted as being my first patient of this class. He is now grown to man's estate, and would never permit any attempts looking to permanent removal of his troubles. However, his physiognomy was such that polypi were unable to work any material change for the worse. Recently, a second case came under observation, under the care of a brother practitioner, in which the bridge of the nose was greatly broadened, and to such a degree as to present the typical so-called "frog-face." In this case, the trouble began thirty-five years before, or when the patient was about the age of nineteen or twenty. Marked deformity, however, is of infrequent occurrence, except when the trouble is of long standing and is induced before the full growth and development of the individual were attained. Morell Mackenzie declares: "Facial disfigurement is so rare that it may be dismissed from consideration"; and some authors have been at pains to deny its occurrence altogether.

I must confess, moreover, to have been among the skeptics until convinced to the contrary by ocular evidence. Evidently, like all rules, those referring to polypi are capable of exceptions.

Epileptic convulsions I find cited as one of the evidences and results of polypoid growths, but such are necessarily of greater rarity than face-distortion, and are of reflex origin; hence they are deserving of merely passing mention. The primary cause of polypi is among the many things open to conjecture. Morell Mackenzie frankly admits his ignorance, and Bosworth is equally frank. Two writers suggest their production to be the sequel of long-continued swelling and infiltration of the mucous membrane from which they spring. Be this as it may, the causes undoubtedly are many and varied; they may be dependent upon either general or local mal-nutrition or reflexes. Further, careful examination of the surroundings and locality of the habitat of such growths, while it may not reveal absolute causes, certainly affords some clue to effects.

Note that the middle and superior turbinated bones are portions of the ethmoid. The ethmoid cells, moreover, are developed about the fourth or fifth year of childhood. In the formation of these cells, the spaces in the upper portions of the nasal cavities are probably encroached upon, and the process of narrowing the recesses by the bending and twisting of the cartilaginous and bony plates is evidently now inaugurated. That this encroachment increases with physical development and growth is not to be gainsaid; hence, that it is a factor in polypi-production would seem evident from the fact that growths do appear as early as the eleventh year. Two surfaces touching one another may induce irritation and secure an increased flow of mucus. The surfaces thus approximated readily retain portions of the excreted material, the flow of which is stimulated. Accumulated mucus always becomes more or less inspissated; and such a tenacious clinging mass, dragging upon the mucous lining where it is vascular and plentifully provided with connective tissue, evidently may, and does, at times, cause a yielding which results in the development of polypi. From the statistics already given, based upon examinations of cadavers, the actual attachments in thirty-six out of forty-two cases were at points over which the mucus from the cavities adjacent to the nasal fossæ must flow.

Among the causes necessary to the production of polypoid growths, then, we appear to have: (1) Narrowing and contraction of certain portions of the nasal cavities; (2) irritation of mucous membrane; (3) mucus more or less inspissated, and therefore tenacious; (4) a vascular surface well supplied with connective tissue, and capable of being dragged upon by tenaciously-adherent mucus acting as a mechanical force!

When there is no irritation in the nasal passages, no crowding of one part by another, and when all the cavities and the meatus are readily reached by the to-and-fro currents of air, excessive moisture and excessive mucous accumulation, and the apparently essential conditions to polypus-production, do not exist. In the young (prior to the tenth or eleventh year), excessive secretion and other abnormal conditions favorable to such growths may have place, but it is probable there is greater tonicity and firmness of mucous tissue, not easily overcome by accumulated and dragging secretion; and certainly the amount of connective tissue is less.

The symptoms of nasal polypi demand no especial mention, since they have already received general attention in speaking of effects. And definite diagnosis, of course, must be had as the sequel of ocular inspection of the nares. Examination through the anterior nares, made by means of the forehead mirror and speculum, or, better yet, a pair of curved dressing-forceps in lieu of the latter, will invariably disclose polypi, if such exist, and they always appear as white and glistening, or pearly-white, obstructions. If, as is sometimes desirable, the posterior nares are to be inspected, a rhinoscopic or the smaller laryngeal mirror is employed. The condensation of moisture upon the latter during use is readily obviated by warming slightly over a lamp. If, on touching the supposed growth with the blunt end of a probe, the point under impact yields, or the body is movable, there can be little doubt as to the correctness of prior conclusion.

Many methods of treatment have been suggested from the time of Hippocrates down to the present. Four hundred and eighty years before our era, the "Father of Medicine" employed sponges for this purpose, attached to cords passed through the nose to the posterior pharynx and returned through the mouth; by traction with a reverse movement, the growths were brought forward with the sponge. Galen employed astringents; Celsus the actual cautery; Paul of Ægina the knife and tenaculum; William

of Salicet (1546) was the first to introduce evulsion by forceps, a method that yet holds its own with general practitioners, as well as with many teachers. One hundred and fifty years subsequently, Valsalva suggested the removal of a lamilla of bone for the purpose of preventing the recurrence of polypi. Robertson (1805) invented and employed the snare. Finally we find no less than six methods still advocated, viz.: 1. The method of Hippocrates; 2. Removal by snare; 3. Evulsion by forceps; 4. Galvano-cautery; 5. Topical application of astringents; 6. Caustics and escharotics.

(1) To revive the first has recently been sought by McRuer, of Maine; but the method obviously has nothing to recommend it and meets with little if any favor. (2) Snaring of late years is generally performed by means of wire *écraseurs*, notably those of the Jarvis pattern. The introduction of the loop is not always easily or readily accomplished, is productive of more or less pain, and, after adjustment, the suffering produced by tightening and the process of removal is sufficient to prevent the patient from undergoing a second torture usually necessary to clear wholly the nasal passage of morbid growths. (3) Evulsion by forceps, for all it has held its place for many years, and is so extensively taught and recommended, even by some of the most eminent members of the profession, is a most barbarous procedure, and withal uncertain, unsatisfactory, and dangerous. Not only is the pain evolved thereby often most excruciating, but free hemorrhage obstructs the view after the first effort, and the operator is compelled to grope blindly for that which cannot be discerned. Not infrequently it results in tearing and lacerating healthy tissues. Such surgery is only comparable to that of the Indian *powah* who, with a pair of bullet-molds, tore away a soft palate and elongate uvula to relieve a hacking cough. The end does not justify the means, considering the other methods available. Again, most polypi spring from the region of the middle meatus, and ordinary forceps cannot reach the pedicle. Even though the turbinated bones be wrenched from their attachments or removed piecemeal, the growths invariably return. It is a question, to my mind, whether evulsion does not favor subsequent production of these bodies.

(4) The galvano-cautery is open to the same objection as the snare, and is even more tedious and painful, and especially liable to injure surrounding and sound tissues. Further, it is an appliance of the specialist rather than the general practitioner.

(5) Astringents, especially tannic acid, are recommended by an authority no less eminent than Thomas Bryant, who advises their application to the growths by insufflation. Twenty years since, I employed tannic acid in two cases with excellent results; subsequently it proved a complete failure so far as removal was concerned, though generally procured more or less temporary relief; it is palliative rather than curative.

(6) Caustics at the present day meet with favor, especially glacial acetic, carbolic, and nitric acids, and tincture of iodine. The former (glacial acetic acid) is especially satisfactory, save for the pain induced, and the difficulty of confining it to the growth alone. The others are open to like objections, and the additional one of unpleasant fetor arising from the slow death induced. Of late years chromic acid has proved most satisfactory in my hands, as it is totally devoid of the unpleasant features accruing to other caustics and escharotics, since its properties are limited to the growth to be removed. It is a solvent of animal tissue, but rapidly loses one-half its oxygen, whereby it becomes a harmless sesquioxide, so that care is required only at the instant of application. Even should it touch sound tissue, a bit of cotton, wound on a probe and dipped in a four per cent. solution of cocaine, obviates all unpleasant consequences. Again, chromic acid is antiseptic and disinfectant; is ten times stronger than carbolic acid; fifteen times stronger than nitric; twenty times stronger than mercury bichloride. The pain resultant from its application is merely nominal.

A saturated solution of chromic acid made fresh with water (*beware of touching with alcohol unless an explosion is desired!*), or the crystals merely moistened, may be applied by means of a fine glass rod or glass brush, or a bit of cotton wound about a slender gutta-percha probe. No especial skill is required. Reflected light obtained by the forehead-mirror should be employed, however, to illuminate the interior of the nose, and the view enlarged, if necessary, by the introduction of the tips of a pair of curved dressing-forceps. The growth absorbs the acid quickly, which insures its death, and the polypus comes away spontaneously in a few hours, or, at most, a few days, a second application being rarely required. Dr. Donaldson, who employs chromic acid, remarks that his invariable custom is to bathe and wash out the passages with lead-water

before applying the escharotic. This I have never done, and apparently no especial advantage is to be derived therefrom. As there are usually several polypi, as soon as one is removed, those behind should be attacked in the same way. Some few patients who had been treated by evulsion have spoken with great complacency of the use of chromic acid, as being pleasanter and nearly devoid of pain. Since it is so nearly painless, invariably effective, and does not upset or frighten either the timid or nervous, and is always within the reach of the general practitioner without especial aids or appliances, it cannot but commend itself.

THE CUTANEOUS EFFECTS OF QUININE.

BY J. M. FRENCH, M.D.,
MILFORD, MASS.

The cutaneous effects of quinine and its allies are not frequently met with, and probably for that reason but little is said of them in the books. Yet when they do occur, they are the source of extreme annoyance to the patient, and very likely of much perplexity to the practitioner, who, when he has administered a dose of any of the alkaloids of cinchona as an antiperiodic, for example, finds, on the following day, as was once my ill-fortune under similar circumstances, that, while the malarial manifestations have disappeared, they have been replaced by certain cutaneous symptoms more disagreeable than those of the original disease, and which he is unable to trace to their source. And when, after repeated administration of the remedy in the same case, he has established to his own satisfaction the relation of cause and effect between the drug and the symptom, he is fortunate if the confidence of the patient in him has not been impaired to such an extent as to prevent his ever having an opportunity to verify his diagnosis by a repetition of the experiment in subsequent attacks

The forms of cutaneous eruption which have been met with as the result of the administration of Peruvian bark or its alkaloids are numerous and varied. Nearly all of them, however, may be included under the heads of erythematous, urticarial, eczematous, or purpuric.

The *erythematous* form is probably the most common. Out of 60 cases reported by Morrow, 38 were of this variety. These were generally described as scarlatinal, but occasionally as rubeolar or erysipelatous.

The scarlatinaform eruption was first described by English authors. In Gassaway's case, it was accompanied by œdema of the face. In Heming's, it came on after the administration of one grain of quinine, was attended with intense itching, præcordial oppression, and a coated tongue, and was followed by slow desquamation. Skinner saw it appear in a woman after taking one grain, or even half a grain. It was accompanied by shivering and a violent chill, and was followed by desquamation lasting three months. Veeder reports a case in which the condition of the skin very closely resembled that of scarlatina. The patient had been taking small doses of quinine for several days, for a supposed malarial disorder, without consulting any physician. Becoming alarmed at the appearance of the rash, a medical man was called in. He found feverishness and general malaise, in addition to the scarlatinous erythema; but, fortunately suspecting the cause, he at once ordered the discontinuance of the quinine, when the rash promptly disappeared. It returned repeatedly, however, when, for the purpose of testing the correctness of his theory, quinine was given in small doses. Dr. Levassor describes a case in which there were high fever, rapid pulse, headache, and general malaise. The eruption soon appeared, and involved not only the integument, but also the mucous membrane of the fauces, but was not accompanied by pain or by any swelling of the tonsils. To complete the resemblance, it was followed by desquamation at the end of four days. Its true nature was not discovered until its recurrence some time later, after a second dose of quinine.

My own case, reported in the *Medical Record* of June 10, 1882, was similar to this in many respects, but its resemblance to a typical case of scarlatina was even more marked. The subject was an Irish domestic, having red hair, blue eyes, and a fair skin, who was suffering from tertian ague. Five grains of quinine or quinamine three times a day were sufficient to prevent the return of the chill, instead of which she suffered the next day from a diffuse erythematous eruption, which began upon the chest and arms, and spread over the entire body. On the forearm there were numerous miliary vesicles. There was also intense itching, with a high temperature—of which, however, much to my subsequent regret,

I kept no record. On the fourth day from the first administration of quinine, the symptoms continuing to increase in severity, a consulting physician of wide experience was called, and he unhesitatingly pronounced the case to be one of scarlet fever. At this time, it must be confessed, there seemed to be good ground for this diagnosis, as the rash was of a scarlet hue, the itching was intolerable, the febrile symptoms were moderately severe, and the tongue presented the typical strawberry appearance. The fauces were somewhat injected, but there was at no time any noticeable soreness or swelling of the throat. Recovery took place in due time, and was followed by copious desquamation. Soon after this, the patient was again attacked with chills and fever, and, on taking quinine, she suffered from a return of the scarlatinous erythema and accompanying febrile symptoms. Twice afterward —making four times in all—she underwent a similar experience, until all parties concerned were fully convinced of the cause.

The *urticarial* form of quinine-rash is represented in Morrow's list by twelve cases. These presented the typical wheals of urticaria, with œdema and puffiness of the face, which, in a representative case, were brought on by a single two-grain dose of quinine. There was also a sense of oppression in the chest, and a most intolerable burning and itching over the entire surface of the body. The symptoms subsided within twenty-four hours, but recurred upon a repetition of the dose. The patient was in this instance himself a physician, who had formerly practiced in a malarial district, and had been accustomed to taking large doses of quinine without any unusual effect.

Numerous cases have been reported of the *eczematous* form, as well as of a combination of the erythematous, papular, vesicular, and pustular varieties with the eczematous. Denk reports one in which the papules, developed upon an erythematous base, were transformed into vesicles, with the general features of an eczema. After the discontinuance of the drug, the vesicles dried up, and desquamation followed. In some cases, the vesicles burst and form thick crusts, simulating still further the features of an acute eczema.

The *purpuric* form is very rare, and consists of small ecchymotic spots like ordinary purpura, either localized or generally diffused. In Vépan's case, which was that of a woman suffering from neuralgia, these spots developed all over the body in two days after taking five grains of quinine in two doses, and disappeared nine days after the discontinuance of the remedy. This was repeated several times, the symptoms varying in intensity with the size of the dose. Morrow has observed the purpuric eruption in a boy of twelve years of age, following the administration of quinine for malaria; five three-grain pills were taken the first day, four the second, three the third, two the fourth, and one the fifth. Before this course was completed, purpuric spots had made their appearance on various parts of the body, but most abundantly on the lower extremities.

Still other forms of quinine-rash have been met with, though but rarely. Among those which have been described are the roseolar, bullous, and gangrenous.

Not only has the quinine exanthem resulted from the internal administration of the drug, but similar eruptions have been known to follow its external application, as in the case of workers in quinine-factories, and persons using ointments, pomades, and washes containing quinine. This suggests that the result in all cases may be due to the local action of the drug upon the skin, either directly when used externally, or by elimination through the glandular system when given internally. It will probably be found, also, that more cases occur in persons having sensitive skins than in tough-skinned individuals. Certain it is that the majority of cases reported have been in women and children, in whom the cuticle is more sensitive than in adult males. In my own case, the subject had red hair, blue eyes, and a light and sensitive skin. It would be interesting to know how this may have been in other cases, but, so far as I am aware, these facts have seldom been noted.

The appearance of the quinine exanthem is said to be more common in summer than in winter, and to affect eczematous persons most frequently. The liability—or idiosyncrasy — may be either hereditary or acquired. Future observations in these directions are needed before a satisfactory theory can be formed.

—Prof. Billroth, who led the opposition, a few years ago, to the admission of women to the Continental medical schools, has created something of a sensation in Vienna, it is reported, by having Dr. Grace Walcott and three other American women physicians repeatedly in attendance at his private clinic lately, to witness his own operations.

THE ETHICS OF OPIUM HABITUÉS.

BY J. B. MATTISON, M.D.,
BROOKLYN, N. Y.

In a paper by the writer, on "The Ethics of Opium Habitués," read before the Society of Medical Jurisprudence and State Medicine, New York City, June 14, 1888, and reported in the REPORTER July 7—reprint at command—attention was called to the prevalent opinion that all opium habitués are liars—an opinion that the writer declared, from his experience, to be unjust and untrue.

Distinctly asserting that the purport of his paper did *not* apply to "those who, viciously indulgent, and lacking alike in principle and purpose, take opium from mere sensual desire," he held that the statement "no morphia habitué can be depended on to tell the truth" was "so often at variance with the fact, that it must be the outcome of an experience with the baser class of cases, or added evidence of the 'cruelty of ignorance,' or an unwarranted libel on a worthy class of unfortunates," and that, among the better class of habitués, this asserted lack of veracity did not entirely obtain.

Regarding the origin of the opiate neurosis, the writer asserted that, among the class of habitués to which his paper referred, a "physical necessity"—painful conditions of body or mind—for which opium was given, usually by professional advice, and continued until it had created a disease of its own, was the great genetic factor, and not merely sensual indulgence or vicious desire. In an experience covering the history and treatment of hundreds of cases, but two exceptions to this statement had been noted.

Attention was called to the peculiar power of opium to ensnare and enslave—"a power of which the laity knows little or nothing, and the profession appreciates less than it should." "The writer had been studying opium and opium habitués for more than sixteen years, with an annual experience of late, as regards number of cases, probably unequaled in this country, and yet he stood more and more in awe of this peculiar power with every case that came under his care." Some striking instances were presented.

Granting this "physical necessity," and opiate conditions beyond control, it was asked "on what principle of equity or right can one be held accountable, and so, culpable, for his use of the drug, when, unaware of its ensnaring power, and confiding in the counsel of his medical adviser, he avails himself of the relief it affords? What right has one to set himself up in judgment to note the beam in his brother's eye, when the only reason it is not in his own—when the only reason he is not an opium habitué—is because a kind Creator has so conditioned him that this physical necessity, and consequent opiate need, does not, with him, obtain?"

While admitting that the habitual use of opium often prompts to falsehood, the writer advanced the opinion that, in many cases, "the leading factor in this moral obliquity is the principle of self-protection—the habitué's desire to shield himself from that censure which the prevalent opinion—uncharitable and untrue—that he is simply the victim of his own vicious indulgence, involves."

In closing, these conclusions were submitted:

"Reason and right alike demand a more rational and correct idea as to the origin of the toxic neurosis we have noted.

"This demand complied with—regarding such patients, with certain exceptions, as creatures of conditions beyond control, and so no more culpable than the subjects of other functional disorder—will be most helpful against the protective temptation to untruth.

"The medico-legal status of such cases will then be more in keeping with advanced forensic medicine.

"The medical care of these cases will tend to a more humane method, with larger promise of good results, both near and remote.

"It will, too, be likely to lessen the increase of habitués and the number now existing; for a more correct idea as to the genesis of this disorder will prompt medical men to greater care in avoiding the cause, while many a patient, who now shrinks from disclosing his misfortune, feeling that he is not denied the charity that his case deserves, and that he can command resources both helpful and humane, will be impelled to avail himself of the aid that scientific treatment can surely extend."

In the discussion following this paper, one gentleman said "it was the first time in his experience that, in the discussion of a medical topic, a better and a poorer class of patients had been spoken of," and "the author had failed to define the meaning of 'better class.'" Neither criticism is correct; for no reference whatever was made to a "poorer class," the expression being "baser class"; and the writer *did* define the

"better class" as those who—without regard to riches, learning, or social standing—became opium habitués *unwittingly*, from implicit confidence in, and trustful following of, their physicians' counsel, until the continued use of the drug had created a condition from which they could not, unaided, escape; and the "baser class" as those who take opium from vicious tendency or mere wanton desire. Is there not a difference? And should there not be a distinction? Is the *onus probandi* in exculpation alike for both? As well might it be said that the physician who, in pursuit of his calling, or the innocent wife or child who, in the interchange of sexual and social amenities, becomes poisoned with syphilis, is as culpable as one who contracts this disease in the usual way!

It was further asserted by this critic that "in the great majority of cases, the opium habit was contracted through a selfish purpose or vicious tendency," and that "nine out of ten persons who applied for admission to homes for opium habitués were those who had become acquainted with the drug as doctors and nurses, not through taking it for long suffering." The truth of these statements we *emphatically deny*. Dr. Spitzka's assertions are disproved by men of much larger experience than his, and by *statistical facts*, without which a mere *ipse dixit* goes for naught.

Dr. Joseph Parrish, for many years medical director of a sanitarium for alcohol and opium habitués, said in 1872: "Men take it not for pleasure, but for a physical necessity."

Dr. E. H. Van Deusen, Ex-superintendent of the Michigan Inebriate Asylum, wrote: "For the primary induction of the habit, the stated physician is so commonly responsible that the *onus probandi* in exculpation rests upon him by all fair presumption."

Dr. Albert Day, Washingtonian Home, Boston, whose experience covers more than a quarter-century, writes: "Most of the opium cases I have treated, and I do not know but all of them, began with physicians' prescriptions."

Dr. T. D. Crothers, Walnut Lodge, Hartford, Conn, reports: "All the opium cases I have studied show distinct physical causes as a starting-point of the addiction."

Obersteiner says: "The first commencement of the use of morphia is almost always some painful ailment."

Levenstein declares: "The originators and propagators of this disease are the medical men who, in cases more or less painful and protracted, have advised the patients to use the injection of morphia."

Erlenmeyer, in his recent work—now being translated by the writer—asserts: "The causes of the morphia disease are all those painful conditions of body and mind against which the drug is used."

The writer's opinion—"Pain is the parent of opium addiction"—quite accords with those given.

Of twelve cases cited by Sonder, eleven had a painful origin. The exception was a case of alcoholism.

Of twenty-four cases noted by Levenstein in his work, twenty-one began with pain. Of the others, one, a surgeon, to relieve insomnia; a doctor, and a doctor's wife, to combat mental anxiety.

Of fifty cases mentioned by Erlenmeyer, forty-eight were from physical disease. The exceptions were in a case arising from mental excitement, and one from depression.

Of one hundred cases most recently under the writer's care, ninety-eight had their origin in pain. The exceptions were a naval surgeon, from sea-sickness, and a young doctor, whose curiosity to know the effect of opium outranked his good sense, and wrecked him for life.

Dr. Spitzka's statement as to the proportion of doctors and nurses among opium habitués who present themselves for treatment is incorrect. While admitting that physicians make a majority of the professional class,[1] it is not "nine out of ten," nor because they "become acquainted with the drug" through their calling. Erlenmeyer says: "The assertion that physicians become habitués by virtue of their frequent handling of morphia is true in only a small percentage of cases."

For statistical proof of this position, I submit the following facts lately secured from the superintendents of several inebriate asylums:

Dr. Lett, Homewood Retreat, Guelph, Ont., reports: "Physicians, forty-five per cent.; nurses, *nil*."

Dr. Crothers, Hartford: "Physicians, fifty per cent.; no nurses."

Dr. Earle, Washingtonian Home, Chicago: "Physicians, thirty-six per cent.; no nurses."

Dr. Day, Boston: "No physicians; no nurses. Patients were merchants, farmers, clerks, etc."

[1] See "Opium Addiction among Medical Men," *Medical Record*, April 9, 1885.

Dr. Blanchard, Inebriates' Home, Fort Hamilton, L. I.: "Physicians, thirty-four per cent.; nurses, eight per cent."

Mr. Bunting, Home for Intemperate Men, New York City: "In 1887 we cared for fifteen opium cases, of which five were physicians and two nurses."

Of 50 cases cited in Erlenmeyer's work, 16 were doctors, 1 medical student, no nurses.

Of 110 cases noted by Levenstein, thirty-five were doctors, two nurses.

Of 125 most recent cases under the writer's care, sixty-two were doctors, one a nurse.

Of the 300 cases we have cited, 124 were doctors and nurses, instead of 270—less than half—if Dr. Spitzka's statement, "nine out of ten," were correct!

Dr. N. S. Brill referred to the baneful effect of opium on the *morale*, and said "this influence, he believed, was transmitted from generation to generation." This opinion calls for no comment other than to mention the rule—exceptions not frequent—that the habitual use of opium makes the male impotent and the female sterile, and under *such* conditions it is difficult to conceive of *any* influence "transmitted from generation to generation."

USE OF ETHYL BROMIDE IN LABOR.

BY GEORGE B. SIMPSON, M.D.,
WESTON, W. VA.

In communicating this short article, my object is to get the experience of some of my fellow-physicians as to their use of bromide of ethyl in parturition. I began using it some time ago, and intend to continue it whenever my patient will consent, provided she has no physical contra-indication. I usually aim to lessen the acuteness of the pain of the first stage by giving bromide of potash and chloral hydrate, twenty grains of the former with ten grains of the latter every one or two hours. At the beginning of the second stage, I resort to the bromide of ethyl, by administering from two to four drachms in the same manner as ether and chloroform are used. I do not find it necessary to go beyond the point at which pain is obtunded at first, and, as labor advances, I keep pace by increasing the amount, and prolonging the inhaling to semi-unconsciousness. In this way my cases have progressed to the end of labor without the least untoward symptom. Generally the child is expelled without the knowledge of the mother, and then, upon inquiry, she will say that she had some recollection of the passage of the head. The pains, if any difference occurs, are more regular than when no anæsthetic is used; they are, moreover, strong, and do their work apparently without any assistance derived from the use of the voluntary muscles. The effect on the circular fibres of the os uteri is very noticeable after the first inhalation, the general relaxation is pronounced, and it seems an easy task for the patient then to endure the agony of child-birth. Another thing in favor of bromide of ethyl, as compared with either chloroform or ether, is that it does not possess the strong, pungent, and lasting odor which belongs to the last named. On the other hand, the smell is not disagreeable. Nausea is not usual after its use, whilst it generally follows the administration of ether or chloroform. I will here mention, for the benefit of some who may read this article, and who have never used any anæsthetic in labor, something which books fail to teach, which is, that it is not necessary to have the patient inhaling the anæsthetic during the whole time occupied in labor; remove the napkin after each pain, and replace it about a minute before the next pain returns. Direct the patient to take deep, full inspirations. This will give ample time to develop sufficient anæsthesia to blunt the severity of the pain, which is all that is necessary during the second stage. At the close of labor, the effect can be increased to full anæsthesia, if this is deemed prudent.

I have not seen anything in the journals of late respecting the use of bromide of ethyl. As I have been written to for information regarding its use in labor, I thought, in order to enlist an interest in it, I would give my limited experience, and would like to hear from others who have had more. I feel that it is not only safe, but is a God-send to poor suffering woman; and, as our duty demands us to be diligent in our efforts to relieve the sufferings of humanity, we should not fail to utilize every remedy which will aid in the relieving of pain, and thereby also gain the encomiums of our patients.

—Florence Nightingale is now a patient at a London hospital, which she herself founded. It is said that she is suffering from an affection of the spine, which originated as long ago as the Crimean war, when she ministered so faithfully to the wants of the sick and wounded soldiers.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, June 12, 1888.

C. B. Nancrede, M.D , in the chair.

Dr. John S. Miller read the following paper:

A Contribution to the Study of Bone Repair.

The recent observations of Macewen[1] have done much to stimulate the study of bone repair, and have thrown not a little light upon the function of the medullary cells in osteogenesis.

The resort to mechanical irritation of the medullary tissues as a means of accelerating bone repair is an old procedure. Nancrede[2] claims a priority in this for America. As far back as 1793, Eve[3] relates that the lay surgeons of the frontier were wont to make multiple perforation of the external table of the skull where necrosis had followed the Indian mutilation of scalping. And, twenty years ago, Agnew[2] resorted to the same procedure in a case of injury to the head. A fatal termination of the case, however, by encephalic complication, rendered the experiment incomplete. Reports of success by this procedure have been recently multiplied to an extent which will excuse us from repeating them in detail.

That, furthermore, medullary proliferation is not only an element in osteogenesis, but is of itself sufficient to that end without periosteal co-operation, is evidenced by the case of Macewen,[4] in which a considerable restoration of the humerus was secured "by bone-transplantation," after a suppurative inflammation had destroyed both the shaft and its periosteum. The date of this observation is 1878.

The patient was a boy, two years of age. A suppurative periostitis of the right humerus of nine weeks' duration had resulted in total necrosis of the entire diaphysis, and this latter had been removed, leaving a tube of granulation-material lining the periosteum. This tube had been kept patent by suitable dressing, until the whole space had become filled with granulation-tissue, and had finally become a mass of cicatricial tissue. No bone had grown from this periosteum, except in a small part next the proximal epiphyses, where at the outset the periosteum had been found covered with plaques of adherent osseous tissue. In the remainder, there had been no osseous deposit, the result being a flail-like arm, which the patient found so useless that the parents desired its removal.

Macewen determined, however, upon another procedure. An incision was made into the upper third of the arm, exposing the head of the bone, to which was found attached a spike-like process of cartilage. This was removed, leaving as remains of the diaphysis a portion of bone one and three-fourths inches in length. From this point, a sulcus about two inches in length was made in a downward direction between the muscles. The former presence of bone was nowhere indicated. and there was no vestige of periosteum, and the sole guide as to the correct position into which the transplant was placed was an anatomical one. Two wedges of bone were then removed from the tibia of a patient aged six years. with anterior curves. The face of the osseous wedges consisted of the anterior portion of the tibia, along with its periosteum, the wedges gradually tapering toward the posterior portion of the tibiæ.

After removal, they were cut into minute fragments with the chisel, quite irrespective of the periosteum. The bulk of the fragments had no periosteum adhering to them, they having been taken from the interior of the bone.

They were then deposited into the muscular sulcus of the boy's arm, and the tissues drawn over them and carefully adjusted. The wound healed without pus production. Two months after, a portion of bone an inch in length and three-quarters of an inch in thickness was found firmly attached to the upper fragment of the humerus.

Two other wedges of bone, larger in size, were similarly dealt with, and inserted two months subsequently to the first graft, and a third couple were placed in position five months after the first. These filled up the gap in the arm to the extent of four and one-quarter inches. The arm then measured six inches in length.

Soon the utility of the arm was greatly restored. Seven years afterward, he was seen and examined. The shaft of the humerus was found to have increased in length by one and three-quarters inches, being now seven and three-quarters;

[1] Annals of Surgery, vol. vi, p. 289 et seq., 389 et seq.

[2] Internat. Encycl. of Surg., by Ashhurst, vol. v, p. 8.

[3] Remarkable Cases in Surgery, p. 35. Philadelphia, 1857.

[4] Loc. cit., p. 301.

and it had increased in circumference to a marked extent, and assumed a somewhat irregular shape. The length of the sound arm had, however, considerably outstripped the length of the transplanted humerus. He could use the arm for many purposes, taking his food, adjusting his clothes, and many games.

Whether the introduction of proliferating medullary cells into ordinary connective-tissue granulations may convert the whole into osseous tissue, or that a few osteoblasts will, so to speak, leaven the whole mass, is a question involving grave doubt, but the affirmative would seem to receive some support from the case which Nancrede[1] relates in 1883. An extensive laceration had caused denudation and necrosis of the ulna in two-thirds of its extent. The process of repair had been delayed. He drilled numerous holes through the sequestrum into the medullary canal, and, to quote his own words, "in a few days granulations sprang up from the ulna and fused with the granulations of the soft parts, and, in course of time, the fragment was separated."

That the procedure in this case had the effect of stimulating osteogenesis from within, we can readily believe; but, concerning the fusion with granulation-tissue without, a more accurate observation than is recorded by Nancrede is desired, although by analogy we might conceive it possible, inasmuch as repair within the bone is by ossification of an embryonic tissue derived from the connective tissue around the blood-vessels of the medullary spaces. A similar case is reported by Macewen,[2] in which granulations appeared upon a surface of bone completely denuded of its periosteum, and gradually spread until they became united with the granulation-tissue at the periphery of the wound. Macewen, however, infers from this observation that: "The periosteum covering a bone may be completely destroyed or permanently removed, yet the denuded bone may not only retain its vitality, but may throw out cells which will cover it and form a new periosteum."

These cases would seem to confirm Macewen's dictum that the periosteum has no part whatever in the regeneration of bone. But the first case I shall present to your notice this evening demands a different hypothesis for its explanation.

[1] Transactions of the Philadelphia Academy of Surgery, 1888.

[2] Loc. cit., p. 293.

The patient, D. M., aged fourteen years, suffered from an osteomyelitis of the right tibia, resulting in total necrosis of its diaphysis. A complete involucrum had formed around the sequestrum, and afforded an unsteady support to the body-weight. It was covered with the thickened periosteum. A number of fragments had been removed from time to time, and the parents had refused to entertain for him the proposal of amputation. The case, however, when it came into my hands, had become, from septic infection, so desperate that I was compelled to do something radical at once.

Exposing the shaft, or rather the involucrum, through its whole length, I made, with trephine and saw, a fenestrum large enough to permit the removal of the remaining sequestra, and cleared out the whole canal. Both epiphyses were found carious upon their exposed surfaces, and were scraped to the limit of safety. In a few days, a superficial necrosis took place upon the inner surface of the tube.

Demarcation was, however, promptly effected by the free use of aluminum acetate[1] —that sheet-anchor in all sloughing wounds—and a fine layer of fine granulations became the field for any osteogenesis which we might hope to witness. During the long process of repair, with the carious epiphysis as a never-failing source of bacterial supply, it was no trifling task to keep this extensive opening dry and sterilized. Furthermore, neither the patient, the household, nor the neighborhood could endure frequent dressings without great nervous prostration.

The requirements of the case were successfully met by a mixture of iodoform and starch, in proportions which varied with the changing conditions. The cavity of the wound was filled with this dry powder, and to the whole was applied a closed dressing of gutta-percha tissue. The purpose of the starch was to absorb the excess of moisture incident to a closed dressing, as well as to dilute the iodoform. As soon as the powder became saturated, it was removed by a stream of sterilized water, and the wound was filled and closed as before. The periods of dressing were gradually increased from three to ten days. I mention these details, because, without them or similar ones, we can wait in vain for the desired repair. In process of time, the hollow of the involucrum became completely filled with granulation-tissue, which continued to extend until it

[1] ℞ Pot. et alum. sulph., 1 part; plumb. subacet., 5 parts; aquæ bull., 100 parts. M. Filtra.

fused with the granulations from the soft parts, and finally the whole became covered with a new epithelium, which had gradually spread from the edges of the wound. The tissues became now denser, and offered more and more support to the body-weight until, as you see, he has acquired a very useful limb, and can walk without discomfort.

We must, therefore, infer that a metamorphosis into bone has taken place, and, as the original diaphysis was gone with its medullary structure, we can find no osteogenic agent in the result other than the periosteum.

We must draw a similar conclusion from the recent case reported by Ceci:

The patient, a young man, developed an acute osteomyelitis of the left scapula five days after circumcision for inflamed phimosis. One month later, Ceci[1] extirpated the bone, making the usual L-flap. The periosteum was left intact as far as possible, and the arm was preserved. The patient recovered rapidly, and there was a subsequent regeneration of the bone.

The only possible explanation of this result is by the hypothesis of periosteal agency or co-operation.

The second case which I present is in confirmation of Macewen's proposition that "A portion of bone which has its continuity severed on all sides, and has had all its periosteum removed, is capable of living and growing."

This is in contradiction to our inference in the case of the tibia, and can be reconciled only by the assumption that the discovered laws of osteogenesis are of a lower order, subject to some general law of which we are as yet ignorant. But to the case.

Mrs. L., aged forty-seven years, had suffered with a neuralgia of the maxillaris inferior, for the relief of which all medical means had been exhausted in vain, and which, therefore, left to my option only the *dernier ressort* of neurectomy. The mode of operating was the usual one. The ramus was trephined near the angle of the jaw, the canal was exposed, and about two inches of the nerve-trunk were drawn out and exsected. The button was, however, returned after having been sterilized in a 1 to 1000 solution of corrosive sublimate, but it was not returned to its old position. With a view of imposing a barrier to the reproduction of the nerve, it was so rotated around its vertical axis that the groove upon its lower surface stood at right angles to the axis of the canal. Not only did the wound close by first intention, but the button grew solidly in its position. Now, the curious thing in the case is, that before trephining I had carefully removed the periosteum, so that the latter can claim no part in the subsequent bone repair. After seven months, there has been no return of the disease.

Dr. John B. Roberts, in opening the discussion, said: It is a curious fact that the medical mind has not appreciated the possibility of bone production, despite the frequent instances that must always have come under notice. I was taught, in cases of comminuted fracture, to take out the spicules of bone that were entirely separated from the larger fragments, lest they should necrose and give rise to trouble. Now, it is the practice of the best surgeons to leave the spicules, and we find that often they do not die, and that they assist in the process of union and solidification. This experience is in the same line as the facts given by Dr. Miller in connection with his interesting cases. If these spicules of bone can reunite, why not the button removed by trephining? Why is it not good practice to insert, when necessary, a portion of dog-bone or chicken-bone? as, indeed, has been done. We must not forget, however, the importance of asepsis, and that it is antiseptic surgery that has made these procedures possible.

In a case such as Dr. Miller reports to-night, where he rotated the button of bone, turning the groove, in which the inferior dental nerve had run, at right angles to its former direction, I should be inclined to go still further, and turn it upside-down. The bottom of the pit in which it is to be placed and the periosteal surface of the button being scraped, the ungrooved freshened surface, formerly external, would then be placed inward, and a bony plug would be interposed between the divided ends of the nerve, probably preventing the reunion and return of pain which so often occur.

The case of tibial resection has been very interesting to me, as I have recently operated upon a similar one; the patient being, how-

[1] Centralbl. f. Chirurgie, Dec. 17, 1887.

ever, a woman of about fifty years, so that I cannot hope for as complete a closure of the cavity in the bone as in this growing child exhibited by Dr. Miller. In that case, I removed the whole front of the tibia, going as near the articular cartilages above and below as I dared. The process of repair is like that we see in a tree. We know that, if a foreign body is inserted into a wound made in the trunk of a young tree, the process of cell-growth will go on about it, and finally it will be completely covered in, and its presence be unsuspected until, perhaps, the saw strikes it, as the tree is being converted into lumber.

Dr. Keen, in his recent case of trephining for brain-tumor, returned the button of the skull removed, and the patient was able in a few days to walk around with a perfectly-healed and reunited cranium. Then we know what the dentists do in the way of transplantation of teeth, or return of teeth to their original sockets after removal of diseased portions. More remarkable still is the implanting of old dried teeth into new sockets bored in jaws from which even the alveolar process has disappeared, and their becoming fixed there.

Dr. George E. Stubbs: In reflecting upon these cases and similar ones, it occurs to me that perhaps, in the numerous resections we have done in army and in civil practice, we have made mistakes. Surgery has advanced immensely since the war-time, and antiseptic surgery has opened new possibilities. Often, in my army practice, we removed all the bone when there had been a comminution. I should now, with our new light, try to save more of the broken bone, and so shorten the period of recovery.

In regard to operative treatment of neuralgia, I believe that we are entering upon a stage of work that will be much enlarged in the near future. I had a case recently in which neuralgia of the inferior dental nerve had existed for nearly seven years. I removed one and three-fourths inches of bone with the dental engine, took out as much of the nerve as I had access to, and dressed and treated the wound antiseptically. The wound healed by first intention, and as yet there has been no return of pain; so that I consider I have obtained a very good result.

The Chairman, Dr. Nancrede, said: The first question to be answered in a discussion of this kind is: What constitutes the periosteum? If we mean a fibrous membrane, the inner layer of which consists principally of yellow elastic tissue, then we must agree with Macewen's extreme views, and admit that it has nothing to do with bone repair. But, if we study the normal process of bone development, I, at least, must arrive at a different conclusion. The long bones are laid down in cartilage, a temporary structure. How do they ossify? By means of this very periosteum, which Macewen treats with such contempt, and which Ollier exalted too highly. There is a third layer of the periosteum in direct contact with the bone, and this layer is composed entirely of those elements which, wherever we see them, we recognize as the agents of ossification—the osteoblasts. The temporary cartilage is invaded by connective tissue, ingrowths from the periosteum, covered with osteoblasts, and is eaten up by them; and we find it permeated, and finally replaced by a network of fibrous tissue covered with osteoblasts. A certain number always remain beneath the periosteum. A certain number, very small, remain in the Haversian canals, a still larger number in the medulla.

It is clear to me why compact tissue dies; it has so few osteogenetic cells. The medullary tissue lives because it is comparatively rich in osteogenetic elements. Why does bone die when the periosteum is stripped off? Because the resulting inflammation is so severe that the inflammatory tissue strangulates the osteoblasts in the Haversian canals. With antiseptic means, we now control the inflammation, and the osteoblasts are not killed, and the bone is saved.

We are very hard, nowadays, on the periosteum. The fibrous layer has nothing to do with bone repair, but its osteoblastic layer is in direct communication, through the lining of the Haversian canals, with the medulla; it is practically one structure; and thus, if we look at this matter from the standpoint of a correct histology, we find that both views are correct, provided only that we have a distinct understanding what is meant by the word periosteum in each case.

As to Dr. Miller's cases, I cannot quite agree with him as to what formed the bone in the case of total excision of the diaphysis of the tibia. While the shaft was dying, new bone was formed by the deep layer of periosteum; but, after that, the medullary spaces of the involucrum completed the bone. I would also take exception to Dr. Roberts's proposition to scrape the button of bone and turn it inside-out, in the case of trephining the jaw for neuralgia. By this process he would remove all the osteoblastic cells, and the compact tissue would have a

very good chance of dying. One reason for failures in operations about the lower jaw is that it contains so little true medullary tissue, while, on the contrary, we can replace trephine-buttons in the skull and have union, because the skull contains a large amount of such tissue.

I think Dr. Stubbs need not blame himself for his practice in resecting in military surgery. The necessary condition to bone repair is that absence of suppuration afforded by antiseptic methods, and, under the conditions present in the operations he speaks of, he did right. And, to-day, he does right in trying to save the bone. In each case, he takes the proper course in relation to the circumstances, and that is all anyone can do.

The case of Dr. Agnew, referred to in the paper, occurred some twenty odd years ago. I saw the operation. The wound was completely covered by granulations. The fact that a denuded external table did not always necrose was known to Potts and to all the older as well as modern surgeons, and, if Ollier had not led us astray by grafting, by insisting upon the periosteum being the sole osteogenetic agent, ignoring the fact that, in removing it, a layer of cells identical with those of the medulla is torn off, I think we would have arrived at a correct practice sooner. But surgeons went wrong by authority of Ollier, as they are now going wrong in the other direction by authority of Macewen.

In regard to the implantation of dead teeth, which Dr. Roberts refers to, the principle is probably the same as in the bony pegs we used to employ for ununited fractures. They are hollowed out by the granulation-tissue, which develops into a fibrous or even osseous tissue, and so holds the tooth in place by these newly-formed digitations. About twelve years ago, I exhibited to this Society a case in which I resected four and a half inches of the humerus, and about two and a half inches were reproduced from the sawed end. This was without antisepsis. In the case referred to by Dr. Miller, where I drilled the ulna, I am sure that the bone granulations fused with those of the soft parts, for these reasons: the shell of bone, when detached, was not more than one-fourth the thickness drilled through, while the new bone was nearly as thick as the ulna of the other side, as the cicatrix was not materially depressed. A recent experience in a case of knee-joint excision induces me to recommend that, instead of wiring fragments of bone, we nail them together, after having previously drilled, or not, according to circumstances, allowing the heads of the nails to project through the skin. We thus save trouble, and avoid damage in the removal.

Dr. Roberts: Dr. Nancrede misunderstood me in regard to scraping away the cancellated tissue in reversing the plug in the case of trephining the lower jaw. I would scrape only what he calls the fibrous periosteum from the button, and from the bottom of the pit in the jaw I would take away the cancellated structure sufficiently to remove all trace of the nerve-canal. The two raw surfaces would be placed together, and, by sinking of the button, would be a solid bony plug interposed between the nerve ends.

Dr. Miller: I do not see any advantage in reversing the plug over rotating it. The groove being at right angles to the course of the nerve, the part in contact with the nerve is still solid bone, and the groove does not matter at all. In relation to the tibia case, the reason I emphasize the fact that the repair took place from the periosteum is because there was entire death of the old bone with the involucrum, while the periosteum did not die.

THE NATIONAL ASSOCIATION OF RAILWAY SURGEONS.

FIRST ANNUAL MEETING, AT CHICAGO, JUNE 28, 1888.

The preliminary meeting of the Association was held at Chicago, Illinois, June 28, and was called to order by the Chairman of the Committee, Dr. C. W. Stemen, of Fort Wayne, Ind., who said the salient feature of the meeting was for permanent organization. The objects of the Association were to bring the surgeons of the different railroads together annually to develop this special and rapidly growing branch of surgery, to report cases, to relate experiences, to exchange views, and to discuss the best means and methods of treatment in railway injuries.

The meeting was very largely attended, nearly all the distinguished railway surgeons of the United States being present. Sixty-three railroads were represented. The Association starts out with a membership of 600, and promises to be one of the most active surgical organizations in the country.

Dr. W. B. Outten, of St. Louis, read a paper on

A Few Points in Railway Surgery.

He said that out of 103 railway injuries attended by him—caused by the passage of locomotives and cars over the parts involving the superior and inferior extremities, excluding injuries of hands or feet—more than one-third died from shock, and one-tenth died from shock without operative interference.

Dr. J. B. Murdock, of Pittsburg, in opening the discussion, said he had been deeply interested in Dr. Outten's paper, and, in discussing the treatment of railway injuries, the question of paramount importance is whether we should adopt primary amputation, or, as a rule, resort to secondary amputation. If he understood Dr. Outten aright, he recommended secondary amputation in limbs crushed by railway injury. The time at which an amputation should be performed is divided by some authors into the primary, intermediate, and secondary. Others make still further divisions. For instance, Dr. Hamilton does what he calls the *immediate operation*, then the primary, intermediate, and secondary. The primary amputation is made within twenty-four hours of the accident, the intermediate during the inflammatory period, and the secondary after suppuration has set in. He believed all authors agreed that that which was called the intermediate—that is, between the primary and secondary—is an unsafe and dangerous time to perform amputation, for it had been said by military surgeons that the mortality in primary is much less than in secondary amputation. That was the conclusion military surgeons arrived at. It is important for every railway surgeon to know whether he should adopt what has been confirmed by military surgery. It has been his rule, and he believes it to be the correct one, that, if the patient has sufficiently reacted from the shock, to perform amputation, and the sooner it is done the better, and the greater are the chances for recovery of the patient.

The modern rules of doing operations under strictly antiseptic precautions, it is true, have replaced old ones; many of the old rules were certainly useless, as far as statistics show. A great many of our patients die after amputation, from septic poisoning. He would ask those gentlemen who have had an extensive experience, if we are not able to obtain better results by primary amputation now than we ever did before? Do you know that, when we meet with a mangled badly-crushed limb in which vessels or arteries have been severed, we are more apt to have blood-poisoning if we wait, than if we do the amputation at once, before any change has taken place in the vessel or vessels? There is an increased proportion of benefit resulting from the primary over the secondary operation. Indeed, he would go farther and put himself on record in favor of the immediate operation, as a rule. He wanted it understood that he would not do this always. There was one point with regard to the manner in which a car-wheel crushes a limb which should not be overlooked. Frequently surgeons would say—and usually they were surgeons that have not had much experience—that they have saved limbs over which the wheels of a car had gone. Any surgeon who reflects for a moment upon the fact that the weight of an empty gondola car is about 17,000 pounds, and observes the mechanism of the flanges, which act, so to speak, like a powerful pair of scissors—if he will recollect, furthermore, that a pair of wheels weigh 500 pounds, a locomotive 50,000 pounds, and the lightest box-car 17,000 pounds—he will come to the conclusion that not many limbs are saved after a car-wheel goes over them. When a car goes over an object, about one-third of its weight rests upon the object as it goes over it. He had not much confidence in surgeons who claimed to save limbs over which car-wheels had gone.

Dr. W. P. King, of Sedalia, Missouri, had been doing surgical work for railroads about twelve years; he had charge of a large railroad hospital, and had treated, from time to time, a great many wounded men. It was an unfortunate circumstance for those who were injured on railroads to have to undergo amputation. While it is true in regard to other accidents and injuries to which men are subjected, that limbs are saved when seriously injured, it was also true, as stated by Dr. Murdock, that, when a car-wheel passes over an arm or leg, as a rule, that member must come off. He had seen one or two cases, and one particularly in which two car-wheels had passed over the arm of a man, leaving their imprints behind as they passed over. The limb was saved. The man carried a bundle under his arm at the time of the accident, which consisted of old clothes, and which, Dr. King held, saved the arm. He would not arrogate to himself the idea that he saved

the man's limb, or the limb of any man over which the wheels of a car had gone, for by so doing he would place himself in a position he would not care to occupy.

With regard to the wonderful influence that had been wrought upon railroad work by modern antiseptic surgery, he could maintain the position that it is not always necessary to cut a man's leg or arm off in order to prevent septic infection. He claimed to be a pioneer in the use of antiseptics in surgery in the West. He did not care how much a man's limb had been injured, contused, or lacerated, he could prevent blood-poisoning. In the first place, a certain time is required for the entrance of the ptomaines or septic material into the circulation; and, if the surgeon would apply an antiseptic apparatus, washing every part of the contusion and lacerated tissue carefully and thoroughly, he could prevent the entrance of septic germs.

Dr. J. H. Bennett, of Wauseon, O., would like to go back to the foundation of antiseptics. He had practiced his profession for 25 years, had done considerable railroad surgery, but had never applied carbolic acid or bichloride of mercury to a wound—in short, he had never used a drainage-tube. He held that, by using either bichloride of mercury or carbolic acid, he would be adding to that wound a material that would set up an inflammation.

Dr. J. B. Stemen, of Fort Wayne, Ind., said the points set forth in Dr. Outten's paper showed that the author has had a large experience in railway surgery, that he knows what he has written about, and understands the subject thoroughly. It was one of great practical importance to the railway surgeon. While he admired to some extent the remarks of the last speaker (Dr. Bennett), he could not let them pass without entering his protest against what had been said in opposition to modern antiseptic surgery. Being in a position, as railway surgeon upon the Pennsylvania road, where accidents occurred now and then, and sometimes but little or no attention had been paid to antiseptics in the dressing of wounds and sending the cases on to him, he had experienced serious difficulty. With the rapid advances that have been, and are being made in surgery, and from the testimony we have in this country and across the water, the day is past when men can consistently oppose antiseptic surgery. Sir Joseph Lister, in his teachings, has been the greatest benefactor of the present age in advocating it. He could demonstrate to anyone—and it was almost useless to discuss that question, for it had been demonstrated so often—the benefits resulting from an adherence to antiseptics in the practice of surgery. He regretted very much, indeed, that there are still men who oppose it. He knew that Lawson Tait, Bantock, and others did not directly advocate it, yet, in order that a person may visit their operating-rooms, he is almost bound to subscribe to an oath that he has not been in a dissecting-room or in the presence of any infectious disease before he is admitted. All the necessary antiseptic precautions were taken by them, with the exception that they do not use the bichloride.

Dr. J. H. Murphy, of St. Paul, said he had been a railway surgeon for 25 years, and the cases that most annoyed him and his assistants were injuries of the spine. He had at present one case under his care, of fracture of the spine, with paralysis of the lower limbs. Most patients with spinal trouble died. He would like to ask any member of the Association whether there was any manner or means by which such spinal injuries could be relieved. He had resorted to every known form of treatment, but had failed. If anyone had met with success in the treatment of such cases, he would like to know it, the plans adopted, etc

Dr. Outten closed the discussion by saying he did not wish Dr. Murdock to understand him as favoring secondary amputation It depended upon the nature and extent of the injury. In some cases, he would resort to primary amputation, in others he would not, but would endeavor to meet the indications.

Dr. Murphy moved that, when the Association re-assemble, it discuss injuries of the spine. It was in a large number of such cases that the railway surgeon was called upon to testify in court, and lawyers were better posted on this subject than anything else. *In short, they all read Erichsen.*

The Association convened again at 8 P.M., First Vice-President, Dr. J. H. Murphy, in the chair.

Discussion on Spinal Injuries.

Dr. Stemen, of Fort Wayne, opened the discussion by saying that, in 1874, a man working in a gravel-pit in Illinois sustained a fracture of the eleventh dorsal vertebra with compression of the cord and complete paralysis of the lower extremities. The patient was brought to his town in a pitiable condition. A short time after the injury,

he made the operation of trephining—cut down and removed an arch of the vertebra—with good results. Sensation was restored, and the bed-sores healed kindly within two weeks after the operation. The man is still living, and has served in Ohio three terms as Recorder of that County; but there is still some paralysis of the lower extremities.

In the same year, at Macon County, Missouri, he made the operation on a man upon whom a limb had fallen. He removed two arches of the vertebræ, without benefiting the patient. He had since done the operation three times: once for railway injury—the man was caught by a train and doubled up, and fracture produced. He did not get to operate on this case, however, for over a week, on account of having to wait to obtain consent of the family. He finally operated, with no benefit. What he desired to say more particularly was this: He believed the surgeon, notwithstanding what Ashhurst has regarded as unjustifiable, whenever he has fracture of the vertebræ with compression of the cord, and after obtaining the consent of the patient and his friends, should cut down and elevate the depressed bone, and, if there has been an injury of the cord, he believed the operation would be a successful one; and, although he had only met with success in one case, he regarded the operation as justifiable, and would advocate it.

Dr. David Prince, of Jacksonville, Illinois, reported the case of a man who was thrown out of a wagon by a runaway team; the end of the wagon fell across his back, paralyzing his lower extremities and bladder. The tenth dorsal vertebra projected considerably beyond the eleventh. The patient never recovered the use of the lower extremities, and, about a year after the accident, died. He thought the patient died principally from irritation connected with his helpless condition. In the light of what had been said by Dr. Stemen, he would not hesitate to cut down and remove an arch or two arches of bone and see what the results would be.

Dr. J. Harvey Reed, of Mansfield, Ohio, said it seemed to him that, as railway surgeons, we have to consider spinal injuries under two general heads: *First*, pseudo-spinal injuries; and, *second*, true spinal injuries. The worst class he had to treat, and which gave him the greatest amount of annoyance, was the *pseudo* class, which lawyers usually "trumped up." For instance, a fellow is hurt; he, perhaps, does not report to the surgeon at all, and, in the course of six months, sues the company. The surgeon is called upon to defend the company. The question comes up for the surgeon to decide whether that man really has spinal injury, or whether he has not. It is an important question—one that embraces finance and morality. The railway surgeon is morally bound to give that man the benefit of the injury he has sustained; at the same time, he is bound to support the company if the patient plays the part of an impostor. He had found, in his experience, that this class of cases was the hardest for him to decide positively as to diagnosis, and to do what he considered his conscientious duty to the road to which he belonged.

As to the cases of *true* spinal injury, there was no question about the diagnosis. If we have a fracture of the spine, with all the true results, it was not difficult to decide.

He would agree with Dr. Stemen that, where there is fracture, with compression of the cord, the proper thing to do was to cut down and relieve the pressure, just as we would relieve the pressure upon the brain from a depressed fracture of the skull. These fractures may be slight; the pressure may be slight; yet grave results sometimes follow them, just as they do slight pressure and injuries of the brain, which result fatally in six, seven, or ten years afterward. He was satisfied that surgeons had been too conservative in the matter of operating upon the spine. Dr. Ridenour, to his knowledge, had trephined the spine with favorable results; and he could not see any tangible reason, nor, in fact, any more danger attached to trephining the spine than in trephining the skull for lesions of the brain. If we can do it with impunity in the skull, why can we not do it with impunity on the spinal cord? He was firmly convinced that many difficulties could be relieved by trephining. It is true, these difficulties will sometimes be relieved spontaneously, just as gun-shot wounds of the abdomen, intussusceptions, etc., get well spontaneously. This was not the rule, however.

Dr. Reed then related a case of fracture of the atlas. The man recovered. The accident occurred five or six years ago; the man came very near dying last week. The injury that the fractured vertebra is producing on the spinal cord, in his judgment, will, sooner or later, produce death.

Dr. Murdock, of Pittsburg, thought it was the desire of the Association to have taken up the subject of Erichsen's Spine, so as to include all injuries from so-called spinal

shock up to that of fracture of the vertebræ and compression of the cord.

Fortunately, his experience was not very extensive, for he had only met with two cases of fracture of the spine, which, he regretted to say, terminated fatally. He thought, if any surgeon could instruct the Association how to treat fractures of the spine with a reasonable degree of success, whether by suspension, jury-mast, plaster-of-Paris, wiring, trephining, or otherwise, he would confer a great benefit upon the members.

In this connection, he saw the report of a case (he thinks in a Kansas journal) of a new-born child in which the spinal cord is said to have protruded, or separation taken place, a few days before birth, in which the doctor cut down, returned the cord, and wired all vertebræ separated together, and the child is still living.

What should be said of those cases in which we have supposed spinal injury without lesion? He would hold, and believed it to be true, that there is no such thing as a serious injury of the spinal cord without a lesion. He did not believe there could be such a thing as a paralysis, or any serious disturbance of the nervous system, such as we often heard complained of, without some kind of change in the structure of the cord itself.

Dr. W. A. Ward, of Conneaut, Ohio, fully agreed with Dr. Reed in regard to diagnosis. Although he had not had much experience with injuries of the spine, yet the remarks made vividly called to mind a circumstance in which he was placed. A lady in a wagon, attempting to cross a track, was struck by a gravel-train that was backing up. She claimed to be seriously injured, and commenced suit for recovery of damages. The case ran along, and was finally set for trial. Dr. Ward had no knowledge of the case whatever, but had received a communication from the counsel of the railroad, requesting him to examine the case and make a report of it. When he got there, they claimed that the lady was seriously injured; that she remained comatose for twenty-four hours or more. He took his time, examined the case thoroughly, went home, and wrote out his report to the effect that, although he believed the woman was injured at the time, it was only temporary, and that she was suffering from hysteria. He would not be surprised, as soon as the case was settled and out of the way, to see her make a rapid recovery. He called attention to the fact that she was injured at the outset, and remained comatose for a considerable time, which afforded an excellent foundation upon which the lawyers could build a case, but he considered the superstructure faulty and defective. The lady sued for $25,000, but the claim was adjusted for less than $2,000. A year or so afterward, he inquired about the lady, and learned that she was dead. He could obtain no facts in the case, and, while the question occurred to him whether he had erred in diagnosis, he was fully convinced that her death had no direct connection with the injury. Had the woman died before the case went to trial, he had no doubt the lawyers would have attempted to make the jury believe that death was directly and unmistakably attributable to the injury.

Dr. V. P. Gibney, of New York, being called upon to address the Association, said that, while he was deeply interested in the subject of spinal concussion, or Erichsen's spine, his practice had been limited in that direction. He would like to have some one tell him how to differentiate between the *pseudo* and *true* cases of spinal trouble. This was not an easy matter to do. He thought that, if we looked to neurology, we would be able to discover, at all events, whether there is any lesion or not. There were a few things in neurology with which the general practitioner could acquaint himself.

Dr. W. A. McCandles, of St. Louis, said that, something over six months ago, a brakeman was setting a brake, and the rod broke, throwing him back upon the car. He was brought to the hospital with lower extremities paralyzed. After being there some weeks, making no exhibition of any feeling or sensibility in the lower extremities, he became suddenly blind in one of his eyes and described the sensation as if a sharp body had pierced his temple. About the same time he lost his voice, so that for months whispering conversations were held with him. He was very much interested in the case, because the patient had every appearance of being a good, honest, sincere man. Dr. McCandles consulted a neurologist, ophthalmologist, and laryngologist, which constituted the consulting board of the department to which he belonged. It was some time before he consulted these gentlemen, however, believing that the conditions were genuine. The man lay in bed five months without apparently moving his limbs. First, the laryngologist was called, who, after examining his throat, said there was no reason why the man could not

speak and articulate distinctly, as the cords opposite came in contact with each other. Next, the ophthalmologist was called, who subjected the patient to the prism test, and said there was nothing to prevent him from seeing. Different tests were made to determine whether he could, by any possibility, be compelled to move his limbs. Pins were thrust into him without avail. His legs were œdematous, cold, death-like. The three specialists (Dr. Alt was the ophthalmologist in this case) saw nothing wrong with the man. Shortly afterward, he met one of his comrades and joined him in a drink, and, if the reports were authentic, the man proved to be a malingerer.

Dr. T. M. McIlvaine, of Peoria, Illinois, said that, some five years ago, he was sent 40 or 50 miles to see a woman who had, 14 months previously, received a railway accident in Iowa. She was thrown from her seat to the floor, striking on her shoulders. She immediately got up; made no complaint. Her clothing was torn somewhat, for which she received $20 on account, and signed a release as part of the damages from the company. She went home, resumed her usual vocation, and for five months made no complaint whatever; but shortly after this she complained of a tender spot in the spine, which seemed to increase. Various reflex symptoms came on—vomiting, urinary trouble, etc.—until the woman was totally disabled. Suit was brought against the railroad company for $5,000. Dr. McIlvaine was unable to find any lesion. He visited the surgeon who examined her at the time of the accident; there was no redness of the parts, and no pain. The case was traced, a detective put to watch the woman two or three months, she at that time living 40 miles from the railroad, in a small country town. The case proceeded to trial; she won it It was appealed, and she won it again. Dr. M. had kept track of the woman for five years, and she was absolutely perfectly helpless. Whether there was a palpable lesion or not, he was unable to say, but he thought there were a number of such cases that could not be controverted, and the railway surgeon may as well face the music. The best way to do is to follow them up to find out whether they are malingerers or not.

The following papers were read:

Report of Two Cases of Successful Triple Amputation for Railway Injuries, by Dr. J. B. Luckie, Birmingham, Ala.; Synchronous Amputation, by Dr. N. C. Lynd, New York; Report of a Case of Simultaneous Triple Amputation with Recovery, by Dr. A. J. Banker, Columbus, Ind.; First Care and Treatment of Railway Injuries, by H. H. Middlecamp, Mo.; Relations of Railway Surgeons and Members of the Bar, by Lagrange Severance, Ind.; External Wounds Communicating with Fractures of Bones, by Dr. J. R. Williams, Michigan; Report of a Case, by Dr. William Caldwell, Ohio; Treatment of Compound Fractures, by Dr. W. L. Buckner, Youngstown, O.; Brakemen's Injured Fingers, by Dr. J. A. Jackson, Milwaukee, Wis.; Fracture of the Spine with Reports of two Cases, by Dr. W. C. Henry, Indiana; Violent Injuries of the Pelvic Bones and Pelvic Viscera, by Dr. W. A. McCandles, St. Louis, Mo.

The following were then elected officers for 1889:

President, Dr. J. W. Jackson, Kansas City, Mo.; First Vice-President, Dr J. H. Murphy, St. Paul, Minn.; Second Vice-President, Dr. J. B. Murdock, Pittsburg, Pa.; Third Vice-President, Dr. A. W. Ridenour, Massillon, O.; Fourth Vice-President, Dr. B. L. Hovey, Rochester, N. Y.; Permanent Secretary, Dr. C. B. Stemen, Fort Wayne, Ind.; Assistant Secretary, Dr. J. H. Tressel, Alliance, O.; Corresponding Secretary, Dr. E. R. Lewis, Kansas City, Mo.; Treasurer, Dr. J. Harvey Reed, Mansfield, O.

St. Louis was chosen as the place of next meeting.

Periscope.

Treatment of Broncho-Pneumonia in Children with Application of Ice.

Dr. Angel Money, Assistant Physician to University College Hospital, London, in a communication to the *Lancet*, June 2, 1888, says that he has treated many cases of severe broncho-pneumonia in infants and children with applications of ice-bags. The cause of the pneumonia does not, in his experience, influence the employment of the ice-bag. It may be used with much success even in cases of broncho-pneumonia secondary to tracheotomy, but still more favorably in cases occurring in influenza and measles. The smaller the child, the more marked, he says, are its effects. In very small infants, under one year of age, the ice-bag may be placed on the head, the hair having been previously thinned and shortened if necessary. The treatment, to be successful, must be carried out with a will and system-

atically. As a general rule, the temperature in the rectum affords the best guide to the application of cold, and those acquainted with broncho-pneumonia well know the highly-marked remittent or almost intermittent character of these affections. Ice-bags have the objection that they often give rise to a little wetting of the child; but this has not, in his experience, proved injurious to the patient. Leiter's tubes have been tried, and have some advantages, being especially valuable when an intelligent nurse is in attendance. In severe cases, in which a rapid effect is required, two ice-bags have been placed on the head and one over the chief seat of consolidation in the lungs. With a little management, he says, it is not difficult to keep these in place; certainly not when the neuro-muscular prostration is marked, as it almost always is in severe cases. The chief merits of this treatment, he says, consist in the maintenance of the strength, not only of the heart, but also of the respiratory centres and of the nervous and muscular systems. Although otitis media occasionally occurred, yet this has not been more frequent than in cases treated without cold. Albuminuria, he says, is not rendered worse by the cold, nor have any cases of hæmaturia been observed, although Dr. Money has been at some trouble specially to collect and test the urine. The duration of the disease he declares to be, on the whole, shortened. Convalescence is almost invariably rendered more rapid, doubtless because of the conservation of the child's energy.

Not only, he says, does the cold directly quiet the heart and steady the circulation, but the calming of the nervous system also acts indirectly in the same direction. The respiratory centres are similarly beneficially affected. The heat-regulating apparatus manifests more clearly the same beneficent action, and the temperature-chart shows a similar harmonious effect. It is curious to observe the almost immediate cooling of the whole surface of the body soon after the application of ice to any part, this cooling effect being perhaps best marked when the ice is applied to the head; the hands, previously red and hot, become cool and slightly blue. The change is decidedly favorable, notwithstanding the supervention of the signs of feeble circulation in the exposed parts of the skin. Vomiting and diarrhœa, alone or in combination, may require treatment in the cases under consideration; the cold method, he says, does not increase diarrhœa, but certainly tends to stave off vomiting. Stimulants are to be used when indicated, but they are less apt to be necessary under this treatment. There is, he says, a saving of expense all around: the cost of the illness is lessened and there is less expenditure of reserve strength.

Administration of Salol to Children.

Demme reports in the *Wiener med. Blätter*, No. 51, 1887, a number of interesting investigations made as to the action of salol on children. He employed this drug in four cases of articular rheumatism, two cases of acute endocarditis and pericarditis with but slight rheumatic complication, two cases of vesical catarrh, and as an external dressing in two cases of serious burns. Two of the patients with acute rheumatic polyarthritis were boys of eight and thirteen years of age. Both of these, as long as there was fever, swelling, and painfulness in the joints, received doses of fifteen grains of salol at intervals of two or three hours until forty-five or sixty grains had been given. In one of these cases, salol was given for five and in the other for seven days. With the reduction of the fever and of the joint-affection, the amounts of salol were reduced to thirty grains in a day, and, as convalescence was established, but fifteen grains were given. Although in these cases the effects of salol were not astonishingly prompt, yet, on the other hand, there was no relapse of the rheumatic process; so that the duration of the disease, in all, was only from fourteen to sixteen days. In the third patient suffering from articular rheumatism, a girl seven years old, the temperature was reduced from 103.4° to 98.8° F. within forty-eight hours after the administration of seventy-five grains of salol in divided doses, and was accompanied by the reduction of the painful swelling of the foot, right knee, and left elbow-joint. Here also no relapse occurred. The fourth case of rheumatic polyarthritis was that of a girl, nine years of age, in whom the result was less satisfactory. In the first place, considerable difficulty was met with in the administration of the drug. The administration of fifteen grains, whether in emulsion or capsules, produced vomiting within ten to fifteen minutes. After the introduction of thirty grains of salol in egg emulsion as an enema, there occurred within eight or ten hours an eruption of urticaria over the entire body, while no improvement was observed in either the fever or the joint-affection. The use of the remedy was therefore suspended, and

sodium salicylate, in doses of forty-five grains daily, substituted. This substitute was retained, and reduced fever and swelling and pain in the joints, but it likewise led to the production of an eruption similar to that caused by salol. For eight days after the employment of the sodium salicylate, the child was perfectly convalescent, but there was then a relapse of the disease, with the localization of the rheumatism in the right shoulder-joint and metatarsal joints of the left foot. Antipyrine was then given; and this was well borne, and cure resulted in four days, after seventy-five grains in all had been given. In the cases of endocarditis and pericarditis, the action of salol was satisfactory only when frequency of the heart's pulsation had been reduced by appropriate doses of digitalis. In the two cases of vesical catarrh, the salol was well borne. One of these was of special interest, as it was a case of acute cystitis from the toxic action of cantharides. At first, salol was given in doses of twenty-four grains, then of thirty-one grains, and then of thirty-nine grains, daily. On the second day, the alkalinity of the urine disappeared, and diuresis was more abundant and painless. The amount of pus and mucus in the urine decreased, and the boy was regarded as cured. Toward the end of the administration of the salol, a greenish-brown coloration of the urine occurred similar to that produced by carbolic acid.

Notwithstanding this result of Demme, we cannot believe that salol is destined to a high career in practical internal medicines, unless, indeed, it be as a remedy in diseases of the bladder. As our readers no doubt know, it yields, when broken up by the pancreatic juice, about sixty-four per cent. of salicylic acid and thirty-six per cent. of phenol. It cannot affect the system differently from the two substances which it contains, and neither clinical experience nor any scientific reasoning indicates that it has peculiar virtues; and the claim that it is incapable of producing untoward symptoms, and that it agrees better with the stomach than any other salicylic preparation, is doubtfully sustained. It is, however, less disagreeable to take than many other preparations of salicylic acid. But, in a considerable experience, we have been convinced that it is less prompt and less certain in its influence, especially in rheumatic cases. Bethol, although it contains ten per cent. less of salicylic acid than does salol, is probably not less efficient than salol, and is less poisonous, because it has in it the inert naphtholol instead of carbolic acid.—*Therapeutic Gazette*, July, 1888.

Accident from a Laminaria Tent.

Dr. Thomas C. Smith, of Washington, D. C., reports a case in the *Am. Journal of Obstetrics*, July, 1888, which illustrates an accident which may occur from the use of laminaria tents. A young married woman, who had never been pregnant, consulted him for dysmenorrhœa, from which she had suffered since menstruation began. On examination, he found a conical cervix, but there was neither displacement nor disease. On trying to pass a sound, the cervical canal was found to be of such diminished calibre that the instrument could not be made to reach the uterine cavity. A fine probe was finally made to enter the uterus. After some days of preparation, the patient was anæsthetized, and a straight sharp-pointed bistoury, cautiously used, was made to cut its way through the obstruction, enlarging the canal of the cervix sufficiently to permit the introduction of a sound with facility. A small laminaria tent was inserted and allowed to remain until the next day. It was Dr. Smith's intention to introduce a hard-rubber stem pessary to prevent the contraction of the parts; but, owing to severe pelvic pain due to a slight cellulitis, this plan had to be abandoned. For six or eight months, the woman suffered little from pain during her periods; but, after that time, the dysmenorrhœa was as bad as ever. In June of the last year (1887), he made an examination, and found the cervical stenosis greater than it was originally. A solution of cocaine was applied locally, and he was able to divide the stricture sufficiently to admit a sound. Next day, a small laminaria tent was inserted for the purpose of dilating the parts, so that a stem pessary might be used. On trying to remove the tent, he was surprised to find that it would not come away readily, and it was only by using considerable force that the tent was secured. The patient suffered much pain at the time, but this was not to be wondered at when the tent was examined. This was found to have expanded above and below the stricture, but at the point of constriction its expansive power had not been sufficient to stretch the parts, and, as a matter of course, difficulty was experienced in removing the tent, which looked as if it had been tied tightly in the middle with a string. For several days the patient suffered pain, but has menstruated with less pain since that time.

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CONGRESS FOR THE STUDY OF TUBERCULOSIS.

A very important gathering of medical men, devoted exclusively to the study of tuberculosis, took place in Paris from the 25th to the 31st of July. The chief questions submitted for discussion were: The danger of using meat or milk from tuberculous animals; the aptitude of human races, animal species, and organic tissues (*milieux*) to contract tuberculosis; the route of introduction and propagation of the tubercular virus, and prophylactic measures; and the early diagnosis of tuberculosis in man and the lower animals.

It would be hard to give, in a short space, a satisfactory summary of the work done at this Congress, and those of our readers who have opportunity may well turn to the full reports in the French journals, and especially in the *Gazette Hebdomadaire* and *Bulletin Médical*, and study them carefully. But, in order to give our readers an idea of what was brought forward, we may state that the questions proposed proved much too extensive to be fully discussed, and that the time of the Congress was largely occupied with discussion of the conditions which predispose to tuberculosis, and the manner of its communication. The general opinion seems to have been that heredity has a powerful influence in predisposing to tuberculosis, and that the disease itself may be hereditary. Not much seems to have been said in regard to the belief that the children of tuberculous parents inherit, usually, only a peculiar vulnerability, and not a disease, and that they simply give way to that one of the constantly pressing morbific influences which meets with tissues least fitted to resist them.

A great deal was said about the *rôle* played by milk and meat in provoking an outbreak of tuberculosis, and it seems to have been the general opinion that meat and milk from tuberculous animals are frequent sources of infection. In this connection, attention may be called to the discussion as to the possibility of infection through uninjured mucous membrane. A number of observers and experimenters testified that there could be no doubt that infection may, and does, take place in this way, although there was some strong negative testimony in regard to the liability of chickens to contract tuberculosis when fed upon tuberculous matter.

Some interesting communications were made in regard to the infection of human beings by means of wounds into which tuberculous matter was presumably introduced. The testimony given seems to warrant the opinion that infection in this way rarely gives rise to any more serious trouble than what is called "anatomical tubercle"; and it is reassuring to note that M. Barthélémy reported that he had invariably succeeded in curing this lesion

by the application of the actual cautery, in small points placed very close together.

From this brief sketch, it may be inferred —and the inference will be correct—that the Congress on Tuberculosis, while an important gathering, made only a beginning of the work which it may be hoped that subsequent meetings will carry further. In fact, it only dipped here and there into the subject, and decided nothing in regard to the questions before it. The nature of the disease received hardly any attention at all, and its treatment was almost entirely neglected.

One thing more must be said, in regard to the scientific value of the proceedings. No just estimate of them can be formed—unless it be by rarely discriminating minds—without some personal knowledge of those who spoke. All who have experience in such meetings know that what may read like a conclusive argument may come from one who has more ability as a disputant than as an observer; and that zeal in supporting an opinion often leads to a species of mental strabismus or intellectual scotoma, which must be taken into consideration in estimating the value of what some persons see or think.

Giving this fact its due weight, we incline to believe that the recent Congress on Tuberculosis may be regarded as having furnished nothing more than a series of interesting observations, which deserve the careful study of those who have already made tuberculosis the subject of special investigation; but that the chief value of its work was—as might have been expected at a first meeting—in indicating the lines upon which subsequent investigations may be most efficiently carried out. Judged by this standard, the meeting was a success; but we trust that not many will fall into the error of a newspaper of Chicago, which evidently thought that the Congress had settled the whole question of the mode of communication of tuberculosis, and had pointed out measures calculated to lessen very materially its ravages. There is a great deal to be learned about tuberculosis yet, and many meetings like that held lately in Paris may be held before we shall understand just how it comes, or how we may prevent its coming.

TREATMENT OF PHTHISIS WITH INTRA-PULMONARY INJECTIONS OF CREASOTE.

It is now about fourteen years since Dr. William Pepper, of Philadelphia, had the courage to attempt to bring about healing in cavities in the lungs, caused by phthisis, by the injection of iodine into the substance of the lung. After a faithful trial of this method, he finally abandoned it, as the results—while promising at first, and very satisfactory in a certain number of cases—did not prove good enough to warrant its general adoption. Other clinicians have, at different times since then, made attempts of a similar sort; but, so far, all have failed to establish the employment of intra-pulmonary injections as a method in the treatment of phthisis.

Lately, however, Dr. Leon Rosenbusch, in Lemberg, has made a number of experiments, in the General Hospital in that place, in the treatment of phthisis with intra-pulmonary injections of creasote, which have encouraged him to recommend this method for general adoption. In the *Wiener med. Presse*, June 10, 17, and 24, he describes his plan in detail, and gives the results of its employment in ten cases. He obtained the best results from injections of a three per cent. mixture of vegetable creasote with oil of sweet almonds This generally produced, after the first injection, a diminution in the coughing, and a considerable decrease in the fever of his patients, lasting from eight to twenty-four hours. At the same time, the general condition of the patients improved, and the physical signs of consolidation were lessened.

Rosenbusch thinks the period best suited for this sort of treatment is that of beginning disintegration of the apex; but he thinks

it of advantage even in the most advanced cases.

The method employed by Rosenbusch is to inject slowly, with a long needle, about thirty minims of the mixture of sweet-almond oil and vegetable creasote into the substance of the lung. The point to be chosen is where the part affected can be most easily reached. As the greater number of patients with phthisis are attacked at the apex of the lung, he generally injected through the second intercostal space in front or through the supra-spinous region at the back. In his experience, the injections gave little or no pain, and had no unfavorable effect. When he injected into a cavity or into a bronchial tube, the patient soon tasted creasote in his sputa. He recommends, naturally, that these injections be made with antiseptic precautions.

The strong commendation of this method by Rosenbusch has led others to test it, and Dr. T. Stachiewicz, of Görbersdorf, has followed Rosenbusch's method in a few cases. The results he obtained were not so favorable, however. In one of his cases, fever and hæmoptysis followed an injection, and the cough and expectoration increased. Notwithstanding this disappointment, Dr. Stachiewicz is disposed to think that intra-pulmonary injections of creasote may, perhaps, be of service where the cavities are superficial, or where there are hydatids or gangrene of the lung, and he suggests that it may, perhaps, be resorted to in some desperate cases of phthisis as a last resort.

This very temperate endorsement of the method of intra-pulmonary injections, which, as we have said, was first employed in our own country, seems to us quite justified by all the experience which has accumulated in regard to it. Perhaps even more might be said in its favor, and it may, in fact, deserve a place in the therapeutics of phthisis pulmonum in connection with other methods which have come into use with the most recent ideas as to the nature and proper treatment of this disease.

FAITH CURE.

The absurdities and errors of the leaders and disciples of the so-called "Faith Cure" movement have been repeatedly adverted to in medical and secular journals, and it is interesting to find that they are appreciated in theological circles also. In the *Forum*, August, 1888, the Rev. Leonard Woolsey Bacon, D.D.—and M.D. also—has an article entitled "The Faith Cure Delusion," in which, in his trenchant style, he exposes the weakness of the claim these people make, that their belief rests upon a Scriptural basis and is not amenable to the application of usual processes of logical reasoning. Such a claim should at least rest upon a correct citation of Scripture and a reasonable interpretation of it. But, as Dr. Bacon explains, the Faith Cure delusion can show neither the one nor the other. The passage from the Epistle of St. James which is constantly referred to as justifying the claims of Faith Cure is quoted as it appears in the English translation, which does not express the meaning or sense of the original Greek. The most striking defect is in the use of the word "anointing," in translating a Greek word which signifies inunction—the one implying a sacramental procedure, and the other a purely medical operation. An equally important error in the use of this text depends upon a misinterpretation of the injunction to "call for the elders of the Church" in case of sickness. As Dr. Bacon explains, this was an injunction to summon the oldest and most intelligent men in the Church, men wise in the management of cases of sickness, as well as in the comforting of those in religious distress, in order that they might administer at the same time spiritual consolation and medical treatment. The latter, in those days, often began with inunctions with oil, and it was this practice to which the writer of the Epistle plainly refers, since he uses a word which was commonly employed to describe it.

In the light of this rendering and interpretation of the passage referred to, the

claim of Scriptural sanction put forth by the leaders of the Faith Cure movement becomes as absurd as their practice is preposterous. And, even if it were admitted that a literal translation of the expression of St. James might seem to justify a hope that disease might be cured without the intervention of human agencies, the same expectation ought to be held in regard to the satisfying of hunger; for there are in the Bible as distinct promises of relief of the poor and hungry as of the sick. As Dr. Bacon says: "There is positively not one particle more of encouragement there for a 'faith hospital' without physicians or medicines than there is for a faith hotel, with neither kitchen nor victuals nor cooks" Thus it appears that those who cultivate the delusion of Faith Cure have no more warrant in Scripture than they have in medical science or common sense. Meanwhile a patient community tolerates their errors and permits a continuance of their mischievous work. The sick are deceived, weak minds are unhinged, homes are wrecked, and all by persons pretending a desire to do good, and claiming Divine authority for what they are doing. Surely it is time for the law to interfere and to restrain a class of persons who are utterly condemned by the two professions best fitted to judge of the merit of their claims and the effect of their practices.

MILK INSPECTION.

There is one thing which they seem to do pretty well in New York, namely, the inspection of the milk supply. This is due not so much to good laws as to the fact that they are executed by a most efficient and zealous public officer, Dr. R. H. Nevins, who carries out the duties of his office in a way which indicates his appreciation of its importance. One of the measures he adopts to make his inspections fulfill their object is to make sudden and unannounced descents upon milk dealers at the railway stations through which most of the milk supply of New York passes, and then to have the milk in their cans subjected to certain immediate tests by a number of his assistants, and to pour into the gutter the contents of any cans of milk which are below an appointed standard of purity. By this means he reaches more dealers than he can touch; for the fear of an unexpected test must keep many honest who would swerve from the right path if the inspections were made in any other way.

But, valuable as these tests may be, there is one which would, we think, be even more serviceable to the community; this is the inspection of the milk dealt from wagons and so-called milk depots in the poorest parts of large cities. A tour of inspection among the retailers of milk to the poor would, we think, do more to correct the horrible cheating which goes on in this article of food than all the investigations conducted at railway stations. Between the time when a pure milk leaves the inspector at this point, and that in which marasmatic children in the courts or alleys get the thin and spoiled liquid sold for milk, is where honest and intelligent inspectors would be of most service.

The systematic inspection of milk offered for sale is a part of the duty which the Government owes to those who are under its protection, and we wish there might be in every city an authorized corps of inspectors who might come down at any moment upon retailers of articles of food and drink, and hold them to account for what they furnish to their customers. This is the only way—and, if properly carried out, would, we believe, be a sure way—of suppressing the adulteration of food and drink, which is one of the greatest sins of this generation.

—M. R. W. Williams, of Cameron, Clinton County, Missouri, was fined $300 by a local magistrate for dispensing whiskey, although it was done upon the prescription of a physician. The Circuit Court affirmed the judgment of the magistrate, but the Supreme Court of the State has just reversed the decision of the lower court.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

DISEASES OF WOMEN. By Arthur H. N. Lewers, M.D., Lond., M.R.C.P. Lond., Assistant Obstretric Physician to the London Hospital, etc. 8vo, pp. xvi, 400. Philadelphia: P. Blakiston, Son & Co., 1888. Price, $2.25.

This is one of the best hand-books on the subject of diseases of women which we have ever seen. It opens with an admirable account of the way in which one should proceed in determining the nature of the trouble for which a woman seeks relief, and this goes into details in a manner which must prove exceptionably serviceable to those who have—as many medical men unfortunately have—to learn their gynecology without the assistance of personal instruction from masters in the art. After this, the various diseases and disorders peculiar to women are discussed systematically, beginning with disorders of menstruation and ending with nerve-prostration and hysteria. The various operations of gynecology, and the instruments with which they are performed, are well described and fully illustrated, and the details include descriptions of Apostoli's method of treating fibroids of the uterus, and Weir-Mitchell's "rest cure."

It is hard to do justice to a book like this in a limited space, but it is pleasant to be able to recommend such a book strongly to the attention of our readers. Its moderate price places it within the reach of all, and those who buy it will, we think, be as much pleased with its handsome appearance as with the literary and scientific character of its contents.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

Heart and Blood-Vessels in the Young. By A. Jacobi, M.D., New York. From the *Brooklyn Medical Journal*, March, 1888. 19 pages.

The Relations of Mind and Body. By H. R. Hopkins, M.D., Buffalo, N. Y. From *The Medical Press of Western New York*, October, 1887.

An Improved Sphygmograph and its Work. By H. R. Hopkins, M.D., Buffalo, N. Y. From the *Medical Press of Western New York*. 10 pages.

The Ischiatic Crutch. By A. B. Judson, M.D., New York. From the *Medical Record*, June 25, 1887. 8 pages.

—Dr. Jacobi's pamphlet contains the Address delivered before the Association of the Alumni of the Long Island College Hospital, February 27, 1888. It discusses the peculiarities of anatomy and function of the circulatory organs of children as compared with those of the same organs in adults. One of the most interesting features of this discussion is the reference to the methods of the ancients in studying the pulse; and we think it would be well if all medical men showed the same respect which Dr. Jacobi does for the shrewd observations of our predecessors, who, in the absence of such instruments of exact investigation as we possess, cultivated their natural resources to such a wonderful extent.

The whole of this Address is both interesting and instructive, especially as it treats of a subject which has not received as much attention as it deserves.

—Dr. Hopkins's pamphlet contains an Address delivered at the opening of the Forty-second Annual Session of the Medical Department of the University of Buffalo. In this Address, the writer makes an argument against materialism, and in favor of the belief in vital force and the independent existence of mind and soul. His argument is interesting, and the position to which it leads one which is hard to impugn successfully. There is still need for defending it, it is true; but the number of those who scoff at a belief in an immaterial essence in man is by no means so large as it once was, and it is pleasant to find one who speaks with authority to young men, starting them in their medical studies with a warning against the coarse and illogical conclusions of the materialists.

—Dr. Hopkins's paper contains an admirable argument for the use of the sphygmograph as an instrument of precise diagnosis, and a very strong recommendation of the instrument designed and made by Mr. A. M. Edwards, of Buffalo. Dr. Hopkins recognizes the fact that many observers have been disappointed in the use of the sphygmograph; but he attributes this disappointment to the use of imperfect instruments. The Edwards sphygmograph is, in his opinion, so excellent that it does not lead to disappointment, and it has, in his hands, given tracings which are of the greatest value in studying the phenomena of arterial tension. His pamphlet contains, incidentally, a good deal of interesting material in regard to the physiology of arterial tension, amply illustrated, and may be warmly commended to the attention of the readers of the Reporter.

—Dr. Judson's pamphlet describes and illustrates a form of support which he has devised for use in cases of osteitis of the hip or knee-joint, in connection with a high sole on the foot of the sound side. The principles involved in its construction are not new, but the apparatus seems well adapted to its purpose, and it has proved entirely satisfactory in his practice. Its cost is moderate, and, altogether, it seems worthy of the notice of the profession.

Literary Notes.

Littell's Living Age is one of the most welcome visitors to our table. For years it has furnished American readers with the cream of European literature, and those who have become accustomed to its fare could never, we think, give it up unless driven to do so by poverty. "Good wine needs no bush"; and it is hard to find new words as praise for what is so well known and so much admired.

The American edition of the *Illustrated London News* maintains its high standard of contents and illustration. Few weekly publications can compare with this in interest and attractiveness. The contents relate almost exclusively to European affairs and the dependencies of Great Britain; but they have a great deal of instruction in them for our countrymen. The illustrations are unusually fine and very numerous.

Correspondence.

Notes on Diphtheria.

To the Editor.

Sir: Diphtheria is rather an old acquaintance. I treated my first case 34 years ago this month. I hardly knew then what to call it, but it died on time. I have treated it every year since then, with varying success, according to the violence of the particular epidemic.

It has no respect for persons, surroundings, or sanitary conditions: patients in the best being just as liable to die as those in the worst locations. Squalor and filth apparently exert no influence. Diphtheria and croup are not the same. Nineteen out of twenty cases of membranous croup will recover, if properly treated. Diphtheria treated in this way will all die.

It is certainly contagious in the true sense of the word. It can be communicated in all stages; but a convalescent, two weeks after the throat-symptoms have disappeared, is much more likely to communicate it. By far the greater number of cases that I have been able to trace to direct contagion have taken it by playing with such convalescents.

Girls are more liable to contract the disease than boys, and about three girls will die where one boy will, the greater extent of mucous surfaces probably being the reason. The peculiar eruption has been a fatal symptom in every case of it that I have seen; and, when the post-cervical lymphatics are enlarged, feeling under the skin like a handful of flat Lima beans, it is very safe to conclude that you are going to lose the patient, however mild the general symptoms may seem to be. Many children are lost by encouraging or allowing them to get up and play too soon, the heart-muscles not being able to stand any increase in amount of work.

As to treatment, we have none established for the disease. It is easier to find out what does no good than what does. I have heard an intelligent physician say, in our State Medical Society: "The reason that practitioners had such deplorable luck in treating diphtheria was because they did not know how to use quinine, iron, and chlorate of potash." It is probable that he had never seen a case of genuine malignant diphtheria. Experience has taught me not to use arterial sedatives; not to use chlorate of potash, for fear of kidney complication; that iron is useless, and quinine probably worse than useless. I have not given a dose of the latter medicine within the last 10 years, except it would be in a case of doubtful diagnosis in the first stages, and then I have almost invariably had cause to regret it. I am not able to explain just why, but I have been impressed that it exerts an unfavorable effect on the nervous system.

Having been a reader of medical literature, I tried every plausible plan of treating this terrible malady. I have come to the conclusion that remedies must be given with a view to their antiseptic properties. I generally commence with a decided mercurial cathartic, followed by antiseptics, mercurial or other, internally. Hydronaphthol is my favorite; it also keeps the house full of its fumes. Pilocarpine, sufficient to keep the saliva flowing moderately; oil of turpentine internally in teaspoonful to tablespoonful doses, according to age; papoid or trypsin applied to the exudation, both in powder and spray; nux vomica as a nerve tonic, with all the food possible to get them to take, using, with the food, stimulants to aid assimilation. No swabbing or picking at the throat. I have lately seen a case of malignant diphtheria in a child 7 years old recover under the above remedies, the turpentine being given in teaspoonful doses every two hours. I would not have given a penny for his chances when the treatment was commenced, the bronchial tubes being seriously obstructed.

A. Ady, M.D.

Muscatine, Iowa,
June 12, 1888.

Notes and Comments.

A Centenarian.

The hundredth birthday of Col. George L. Perkins was celebrated at Norwich, Conn., recently. The old gentleman looks as if he were good for another hundred, is actively engaged in business, walks four miles to his office every day, and is as erect and strong as any man of sixty. When his family physician died, a few years ago, he offered the vacant place to a young doctor, but with the remark that there was some risk in accepting it, as he had buried seven of his doctors already! He is full of reminiscences of the earlier years of the century, one of these being his ride on Robert Fulton's first steamboat on her trial trip. He was nineteen years younger than Napoleon, and was born in the same year with Byron.—*Philadelphia American.*

Hygienic Conditions in Memphis.

Charles Dudley Warner says: Ever since Memphis took itself in hand with a new kind of municipal government, and made itself a healthful city, good fortune of one kind and another seems to have attended it. Abundant water it could get from the river for sewerage purposes, but for other uses either extensive filters were needed or cisterns were resorted to. The city was supplied with water which the stranger would hesitate to drink or bathe in, from Wolf River, a small stream emptying into the Mississippi above the city. But within the year a most important discovery has been made for the health and prosperity of the town. This was the striking, in the depression of the Gayoso Bayou, at a depth of 450 feet, perfectly pure water, at a temperature of about 62°, in abundance, with a head sufficient to bring it in fountains some feet above the level of the ground. Ten wells had been sunk, and the water flowing was estimated at ten millions of gallons daily, or half enough to supply the city. It was expected that with more wells the supply would be sufficient for all purposes, and then Memphis will have drinking-water not excelled in purity by that of any city in the land. It is not to be wondered at that this incalculable good fortune should add buoyancy to the business, and even to the advance in the price, of real estate. The city has widely outgrown its corporate limits, there is activity in building and improvements in all the pleasant suburbs, and, with the new pavements which are in progress, the city will be as attractive as it is prosperous.

Climate is much a matter of taste. The whole area of the alluvial land of the Mississippi has the three requisites for malaria—heat, moisture, and vegetable decomposition. The tendency to this is overcome, in a measure, as the land is thoroughly drained and cultivated. Memphis has a mild winter, long summer, and a considerable portion of the year when the temperature is just about right for enjoyment. In the table of temperature for 1887, I find that the mean was 61.9°, the mean of the highest by months was 84.9°, and the mean lowest was 37.4°. The coldest month was January, when the range of the thermometer was from 72.2° to 4.3°, and the hottest was July, when the range was from 99° to 67.3°. There is a preponderance of fair sunny weather. The record for 1887 was: 157 days of clear, 132 fair, 65 cloudy, 91 days of frost. From this it appears that Memphis has a pretty agreeable climate for those who do not insist upon a good deal of "bracing," and it has a most genial and hospitable society.—*Harper's Magazine*, September, 1888.

Nurses and Nursing.

To fulfill her duty wherever she may find herself, and to give satisfaction to all, a nurse must possess infinite tact and patience, be a rapid observer, and quick to read the characters of those with whom she comes in contact. The cheerfulness which may brighten one patient may be regarded as obtrusive chatter by another; the constant attentions which will soothe one will irritate the next. The nurse who pleases all must indeed be a wonder. It is reported that a celebrated physician remarked to a patient whom a constant succession of nurses had failed to satisfy: "You had better send to heaven, my dear sir, and demand a hospital-trained angel with a cast-iron back." The financial circumstances of these nurses are a little better than those of their hospital sisters, but their duties are every whit as trying. When the doctor lives far away, the responsibility they incur in cases of danger is great, and often their periods of rest are constantly broken by anxious friends. And frequently, when the patient gets better, the nurse is regarded as a nuisance, and her former devotion is forgotten. It is to be regretted that some institutions, which are merely business speculations, choose their nurses with so little discrimination that discreditable specimens are sometimes met with who throw disgrace on the entire community. As a matter of fact, perfection is no more to be found among nurses than other human beings, and yet these women must be sustained by worthy motives to labor so diligently for so scant an earthly reward. It will indeed be a blessing to many to think that the nurses are to have the practical benefit of a charitable scheme, and that the cases of destitution and misery in their ranks, of which every matron has had cognizance, will now be tales of the past. It is these heroic women who find their way into every household, from the castle to the cellar tenement; who, wherever pain and sickness are rife, come with skilful hands and sympathizing hearts to heal and bless. Facing without fear the risk of infection, a nurse will make her home in a fever hospital; or, beside the dying bed of some poor wretch, will risk contagion of an even more fearful nature. These are the women who never bow down to what Mr. Stevenson calls the "bestial goddess of Comfort and Respecta-

bility"; who can perform the most menial services with dignity, and to whom nothing is common or unclean. These are the women who carry, wherever they go, an atmosphere of noble labor and unselfish enterprise which brings to this work-a-day world a gleam of the glory to come. It is the nurse whose purity and truth break through the crust of skepticism with which our souls were crusted over, and open once more the stream of love and faith which flooded our being in our youth. Before the keen light of earnestness in a nurse's eyes, the froth and frivolity of social life dry up to nothing, and in their stead grow noble aspirations. The influence exercised far and wide by a nurse is almost unbounded, and, if she is actuated by the fervent love of humanity which urges many women to undertake this work, she can carry everywhere with her a glorious torch to light all upward toward more sublime and unselfish aims, lifting them for awhile above the trivial commonplaceness of which too many of us are liable to allow our lives to consist.—*Westminster Review.*

Faith Cure.

On August 19, John Elsey, the founder of the Elsey Memorial Chapel and the millionaire fish-dealer in Washington Market, New York, was baptized in Newark Bay. The faithcurists turned out in large number to take part in the service, and seven others were also baptized. While waiting for the flow of the tide, a meeting was held around the little platform Mr. Elsey has had erected in an opening in the woods. Several men and women told their experience. Mr. Elsey spoke about fifteen minutes. He said that by the faith cure he and his wife had been made whole, his son cured of drunkenness, and his daughter of consumption.

Elusive Hydrophobia Germs.

Saul may be said to be among the prophets when the New York *Herald* finds anything incredible or absurd in regard to hydrophobia. But even this has come to pass. The *Herald*, August 8, 1888, published the following amusing and suggestive item, headed "Elusive Hydrophobia Germs. They passed from dog to horse, and the hens barely escaped.

"A valuable horse, owned by the Smith Trucking Company, on Canton Street, near Park Avenue, Brooklyn, was attacked by hydrophobia some weeks ago, and, as mentioned in yesterday's *Herald*, was shot by an officer of the Society for the Prevention of Cruelty to Animals on Monday last. Yesterday it was reported that some chickens had eaten oats that the horse had failed to swallow, and had also gone mad.

"A *Herald* reporter visited the stable on Canton Street yesterday, expecting to find a number of mad chickens; but he was doomed to disappointment, for the chickens were stubborn, and refused to bark like a dog or whine like a horse. They, however, crowed lustily.

"'If they had eaten the oats,' said an employé of the company, 'the results might have been very painful. Now, just see what might have happened, but which, happily, did not: The chickens might have gone mad and then laid a lot of eggs, which would have been eaten by human beings, and thus the persons who ate the eggs might have commenced to crow like chickens, neigh like horses, or bark like dogs.'"

Policeman's Diagnosis of Hydrophobia.

The daily papers state that a policeman found a colored man on last Saturday afternoon, at Seventeenth and Spring Garden Streets, rolling around in the street and frothing at the mouth. Thinking that the man had hydrophobia, he is said to have procured a rope and fastened him to a tree, summoned the patrol wagon and had him removed to the Philadelphia Hospital. It was found that the man was suffering from a severe attack of colic.

Detection of Iodine in the Urine.

Iodine is best detected in the urine by adding to half an ounce of the fluid, in a test-tube, 40 minims of dilute sulphuric acid and 20 minims of chloroform, or of bisulphide of carbon, and, finally, a few drops of a one per cent. solution of sodium nitrite, closing the tube and shaking well. If iodine is present, the chloroform assumes an amethystine tinge. Freshly-made starch paste may be used instead of the chloroform, and will give to the fluid a blue color if iodides are present.—*Pharmaceutical Era*, July, 1888.

Removing Indelible Ink.

Physicians are often asked how to remove indelible ink, and they sometimes cannot quite remember; so we repeat the following method: First moisten the stain with tincture of iodine, and, after a few minutes, remove the iodine stain with solution of hyposulphite of soda. Finally wash in clean water. Repeat if necessary.

The Juniata Valley Medical Association.

The thirteenth annual meeting of the Juniata Valley Medical Association was held August 14, at Cresson.

The Association was presided over by Vice-President Dr. J. P. Sterrett, of Pittsburg, and physicians were present from Harrisburg to Pittsburg. Several new members were elected.

An interesting paper on hygiene was read by Dr. W. F. Bishop, of Harrisburg, which led to a lively and edifying discussion. Dr. Bishop closed with a lucid exposition of the necessity for pure air and water, and plenty of both, for the maintenance of personal and public comfort and health. The most remarkable feature of the meeting was the adoption of the following resolution:

Resolved, That the charges made at the late meeting of the Pennsylvania State Medical Society by the aiders and abettors of a State board of licensers and examiners that the medical colleges of our State are corrupt and venal, and the medical profession of Pennsylvania is in a debased and degraded condition, are false and slanderous, and are hereby publicly and emphatically rebuked.

The Secretary was directed to furnish our Representatives and Senators with a copy of the above resolution, with a request that they oppose the establishment of such a board of examiners and licensers.

American Rhinological Society.

The Sixth Annual Meeting of the American Rhinological Society will be held at the Gibson House, Cincinnati, Ohio, September 12, 13, and 14, 1888. An interesting series of papers and discussions is on the programme. Dr. C. H. Von Klein, Dayton, Ohio, is President; and Dr. John North, Keokuk, Iowa, Secretary and Treasurer.

Mississippi Valley Medical Association.

This Association will meet in Pickwick Theatre, Jefferson and Washington Avenues, in St. Louis, September 25, 26, and 27, 1888, two weeks later than first announced. This date was selected in order that the cheap railway rates during the carnival season in St. Louis might be made available.

For further information, address I. N. Love, M.D., Chairman Committee Arrangements, Lindell and Grand Aves., St. Louis.

NEWS.

—Dr. J. W. Arnold is reported to have been shot and killed by W. J. McMath, near Shreveport, Louisiana, on August 29.

—Professor Gerhardt has been elected Rector Magnificus of the University of Berlin. Dr. Waldeyer is to be Dean of the Faculty.

—Dr. Walter L. Ranney died in New York City, August 17. He was graduated from the University of the City of New York in 1880.

—Paul Langerhaus, formerly Prosector in the University of Freiburg, died of phthisis, in Funchal, Madeira. He was only thirty-nine years old.

—Dr. William Preyer, Professor of Physiology at the University of Jena, and, next to Haeckel, its greatest scientific ornament, intends, it is stated, to resign his position and remove to Berlin.

—Yellow fever is still on the increase in Jacksonville, Fla. Twenty-four new cases of yellow fever and two deaths were reported in Jacksonville, September 1. The total number of cases up to that time was 258; total number of deaths, 34.

—The Trustees of the Ohio State College have elected Professor David S. Kellicott, of Buffalo, to the Chair of Zoology and Comparative Anatomy, the position made vacant by Professor A. H. Tuttle, who goes to the University of Virginia.

—Mr. Lawson Tait, the distinguished surgeon, of Birmingham, England, writes to a friend in this city that he will not be able to attend the Congress of American Physicians and Surgeons, to be held in Washington during this month.

—The *Lancet*, August 18, 1888, announces that Sir Morell Mackenzie's reply to the charges of the German physicians will soon be issued simultaneously in German and English. The English edition will be published by Messrs. Sampson, Low, Marston & Co.

—Dr. Joseph Moore, of Bridgeton, was struck by a train near Bridgeton, September 1, and injured so badly that he died soon afterward. He was driving in his carriage, when the horse became unmanageable and sprang in front of the train. The Doctor was thrown several feet in the air, and fell on his head.

—A Connecticut physician has stated his belief that fresh air, especially at night, is a necessity in the treatment of cholera infantum. The New Haven *News* adds that

lately it has not been uncommon to see a baby-carriage, containing a little sufferer, wheeled by a devoted parent all night long on Fair Haven Heights.

—The *Chemist and Druggist*, August 11, 1888, says that one of the latest uses of saccharin is as an addition to whiskey in place of liqueurs. One-quarter ounce suffices for a hogshead of whiskey, and it is said that it immediately increases the value of the article by exerting a maturing influence upon the spirits. It is certain, at least, that it mellows the flavor of the spirits considerably.

HUMOR.

HE IS A FORTUNATE doctor, says the Philadelphia *Ledger*, who can let off bulletins without feeling their recoil.

THE MAN WHO SAYS he will welcome death as a release from a life made up of sorrow, generally sends for four doctors when he has the colic.

BETTER THAN A BURIAL—Cholly: "I say, Binx, did you ever witness a burial at sea?" Binx: "No, never saw a burial, but we had a wake all the way over, last trip."—*Harper's Bazar.*

A: "WHAT DENTIST made your teeth for you?" B: "These are my own teeth. No dentist made them." "You don't say so! How deceptive they are! Why, they look as nice as the best kind of false teeth. What a wonderful thing nature is."

MAMMA: "Did you have a nice time at the party, Harry?" Harry: "Oh, yes, splendid! I had five kinds of cake. First I had some sponge-cake and chocolate-cake, and then I had jelly-cake and cream-cake, and then I had the stomach-cake."

A HANDSOME PROFIT.—Aunt Emily: "Why do you think you will be a doctor, Bobby, when you grow up?" Bobby: "Because I swallowed a ten-cent piece the other day, and the doctor charged pa two dollars for curing me. That's a good business."—*Epoch.*

ABOUT SEVEN YEARS AGO, George W. Mitchell, of Palatka, Fla., falling against a cactus-plant, one of its thorns entered the calf of his leg. Several weeks later, the thorn was withdrawn from a swelling on his chin. This story is a welcome change from the old newspaper item about a girl running a needle into her thumb, which caused her no pain until six years subsequently, when it was removed from the ankle of her brother-in-law; but it is about as hard on a man's credulity.

OBITUARY.

RANDOLPH S. HITTELL, M.D.

Dr. Randolph S. Hittell, of Argentine, Kansas, a graduate of the Jefferson Medical College, Class of 1870, died March 9, 1888, aged 37 years. By his death the profession lost one of its best surgeons in the Southwest. He was a native of Allentown, Pennsylvania. He was Assistant Surgeon in the Prussian Army during the Franco-Prussian War of 1870–'71. After the war, he returned to Philadelphia, where he practiced medicine for about two years, when he removed to the West, and he became noted as one of the finest surgeons of the country. The cause of his death was typhoid fever.

JAMES SUDDARDS, M.D.

Medical Inspector James Suddards, U.S.N., died at Atlantic City, N. J., August 31. He was graduated from the University of Pennsylvania in 1847. Dr. Suddards entered the United States Navy, May 17, 1849, when he was commissioned an Assistant Surgeon, from which position he was advanced, in April, 1861, to Surgeon. On March 3, 1871, he became Medical Inspector, and, on April 5, 1875, he was made Medical Director. At the time of his death, he was President of the Medical Examining Board, to which he was appointed on April 22, 1884.

THOMAS T. SABINE, M.D.

Dr. Thomas T. Sabine, Professor of Anatomy in the College of Physicians and Surgeons, New York, died August 23. He was graduated from the College of Physicians and Surgeons in 1864, and subsequently served on the house staff of the New York Hospital. While in this position, he showed signs of lung-disease, and subsequently developed marked disease of the lung, which eventually proved fatal.

R. H. MILNER, M.D.

Dr. R. H. Milner, of Chester, Penna., shot himself, near Crum Lynne Station, August 29, 1888. He had been a sufferer with lung-disease for some time before his death, and, for several days during the week before his death, was confined to bed.

He was 47 years old, and was graduated from the Medical Department of the University of Pennsylvania in 1868. Dr. Milner was held in the highest esteem by his neighbors and professional associates. The disease from which he suffered is said to have been contracted during the late war. He leaves only one child, a daughter five years old. His wife died three years ago.

THE

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Communications.

LAPAROTOMY WITH EXCISION OF A PORTION OF THE ILEUM.

BY D. HAYES AGNEW, M.D.,
PROFESSOR OF SURGERY IN THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA.

A large fleshy woman was admitted into the University Hospital, suffering from strangulated umbilical hernia. The tumor was one of considerable magnitude, and had existed for several years, the contents being only partially reducible. She had been seen by two excellent physicians, Drs. Smock and Hughes, before her admission, who had applied the taxis, but without success. When examined by me, the swelling was resonant and flat at different points on percussion, revealing the mixed character of its contents—that is, both intestinal and omental. The vomiting was severe, stercoraceous in character, with threatening collapse of the system. After etherization, a few minutes were employed in a renewal of taxis, but without any favorable result, when a resort was at once had to herniotomy. The overlying layers of tissue being incised, the seat of stricture was sought for at the upper angle of the wound, detected, and divided. The intestine was found to be inky black, and oozing from its surface was a bloody serum. The omentum was greatly thickened by interstitial deposits, by long residence outside of the abdomen, and was really unfitted for being replaced. After waiting a short time to see if the relief of the constriction would change the appearance of the contents, and finding no alteration, I removed the mass of omentum, and exsected fourteen inches of the disorganized bowel with a corresponding part of the mesentery, divided in a V-shaped manner. The vessels being carefully tied, the cut ends of the intestine were now brought together, and united by a series of Lembert silk sutures, extending round the entire circumference of the wound, and placed at a distance less than one-eighth of an inch apart; the depth of penetration of the stitches reached only to the mucous coat. The intestine was now returned into the abdomen, and the parietes closed by a number of interrupted sutures. The entire procedure was done under strict antiseptic methods. Though considerably shocked by the conjoined effects of the disease and the laparotomy, yet the woman reacted satisfactorily, and, in the evening of the day, was quite comfortable. On the afternoon of the following day, she was attacked by nausea and vomiting, threw up a large quantity of blood, and died.

At the autopsy, the ends of the intestine were found fairly well united, except at one point on the mesenteric surface, where one of the stitches had torn out, though no escape of fecal matter was discovered to have occurred. The source of the blood vomited was supposed to have come from the vessels at the seat of operation.

With the light daily accumulating in this department of surgery, it would have been better, instead of stitching together the ends of the intestine, to have brought them out of the external wound and to have attached the half circumference of each to the parietes, preparatory to another and a later operation for re-establishing the continuity of the intestinal canal. The time required for similar operations might be considerably

shortened by adopting the suggestion of a writer, whose name I cannot at this moment recall, viz: Instead of excising the V-shaped piece of the mesentery, to double the redundant portion of that structure on itself, keeping the two layers in contact by properly inserted stitches, and thus converting the two layers into one by an intermediate bond of lymph.

EARLY OVARIOTOMY.

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In an able editorial in the MEDICAL AND SURGICAL REPORTER of August 11, 1888, the following paragraph occurs: "Dr. Sutton, in the REPORTER of June 2, 1888, forcibly insists upon this point (early ovariotomy); but, from the illustrative case which he reports, it might be inferred that the advantages consist in the ease and rapidity with which the operation can be done. A short operation unquestionably favors recovery, not only by the less amount of shock experienced, but by the smaller number of germs which gain access to the peritoneal cavity. Adhesions are much less apt to be encountered in cases operated upon early than in those in which operation has been deferred."

The first and second points—a short operation favors recovery and the less danger of encountering adhesions—are well taken and patent to every reader. But that a short operation is especially advantageous by reason that a smaller number of germs gain access to the peritoneal cavity is questionable, and not in accordance with my experience. Prior to 1881, like many of my countrymen, I was a disciple of Lister. After nearly two years' experience in the clinics of Europe, and long attendance upon the operations, public and private, of Keith, Tait, and Bantock, my faith in Listerism was broken. Nevertheless, it was a difficult matter to get rid of preconceived ideas upon the subject. At a meeting of the American Gynæcological Society, held after my return from Europe, in the autumn of 1883, I read a paper entitled "Cleanliness in Surgical Operations," from which I repeat the following extracts: "Listerism seemed to be just the thing we all needed, and it was almost universally adopted. The object of this method was to destroy these germs, these micrococci, and these bacteria. But the microscope kept on keeping watch over the result, and detected micrococci under the Lister dressings of carbolic acid; yet these wounds healed faultlessly—no pus, no inflammation. Further, living micrococci were found in 5 per cent. solutions of carbolic acid. Two things were now patent—that the presence of all micrococci in wounds did not prevent faultless healing, and that even a 5 per cent. solution of carbolic acid did not in a short time destroy all micrococci. The assertion that the germ theory was not entirely correct was now made; and further, that the antiseptic method failed to destroy all germs."

"Doubts once initiated, a war of arguments and statistics followed, and it was proved, if ever anything was proved, that surgery under Listerism, either entire or modified, was better than it had ever been before.

"The whole argument was based on the supposition that Listerism was carbolic acid, and carbolic acid Listerism. They seemed to forget the great details of cleanliness which the antiseptic method carried with it. They forgot the importance of wet instruments. The believers lauded Mr. Lister and carbolic acid *ad astra*. A few men, practical surgeons, ventured to experiment with Listerism. One, the late Professor von Bruns, ceased using the spray and substituted irrigation; the result was his celebrated enunciation: '*Fort mit der Spray.*' Dr. Thomas Keith had done so well with Listerism in ovariotomy that his results were looked upon as an overwhelming argument in favor of the germ theory of Pasteur and the germicide method of Mr. Lister. But Dr. Keith had this secret: septic poisoning had occurred in his cases in spite of Listerism. Moreover, he believed that one or two of his patients had died from carbolic-acid poisoning. In this view he was sustained by his able friend, Professor Hamilton, pathologist at Aberdeen. Dr. Keith dropped the spray, and proved, by one hundred cases of ovariotomy done without it, that his results were better than in one hundred cases done under it. Dr. Bantock systematically reduced the carbolic acid in the spray until he used only pure water; his results were lower temperatures after operations, and more favorable recoveries. As a result, he gave up the use of carbolic acid, both in the spray and in the pans. Mr. Lawson Tait fell into line with his Scotch colleagues, Keith and Bantock, and led the charge against the entire carbolic system; and these three great men have, so far as abdominal surgery goes, proved the worthlessness of the carbolic-acid-spray

feature of Listerism. All the details of cleanliness attached to the antiseptic method they believe in. Three things were now proved, viz.:

"1. All germs are not deleterious.

"2. Carbolic acid in five per cent. solution does not kill all germs.

"3. That the antiseptic method in abdominal surgery admits, with advantage, of modification."

"But, in matters of cleanliness, let every surgeon learn to be methodical and critical. He must keep always before him the fact that no system of antiseptics will cover dirty and slovenly surgery. There are many surgeons who now no longer use Listerism; but there is no successful surgeon of my acquaintance who neglects measures to insure cleanliness.

"All vessels used about operations should consist of glass or porcelain. Glass, by reason of its transparency, is the better. Porcelain, by reason of its pure white color, stands next. Next to these, brass forms the best material, as it admits of rough usage and can be scoured clean. The water used is better to be first boiled, and, if necessary, subsequently filtered. If the water-supply is from a dirty stream, care should be taken. Distilled water can be largely used when it can be distilled from the hospital machinery. For irrigation, cleansing of sponges and instruments, it may be carbolized. When it is possible in the operating-room, large tanks of pure water—medicated or not, as the operator desires—will be found advantageous. With tube and stop-cock, the supply of water is always ready and within perfect and easy control. Sponges are dangerous in surgery. Their innumerable crevices render them good receptacles for dirt of all sorts, solid or liquid or gaseous. They should never, after being prepared for an operation, lie about uncovered. After operation, it is not safe to trust the cleansing process to either a nurse or assistant. The surgeon should take care of his own sponges. Towels may be substituted for sponges. Kœberlé has not used a sponge in intra-abdominal work for nine years. Instruments should never be permitted to dry after being used until they are washed and dried by the attendants. Dry blood or pus is difficult of removal, and stains, suspicious at least, often remain behind. During an operation, they should be handled only by the operator and one person, who gives and takes them from him. The same may be said of ligatures and needles. If sponges are used, the fewer hands they pass through the better. And all such exhibitions as a relay of nurses and assistants standing about warming sponges in their hands until called for is unsafe, untidy, and suggestive of a poor surgeon. After an operation, all instruments should be thoroughly cleansed; every pincet-point and every needle-eye should pass through a spirit-flame. Prior to the next operation, all the instruments should be again cleansed and scalded. Ligatures should be kept on reels, and always be submerged in an antiseptic fluid—five per cent. carbolic acid; or, prior to being used, be well scalded. Silk thus treated may always be left in the tissues. Boiling it for an hour, with or without carbolic acid in the water, renders it perfect for all purposes. No other ligature is any better, and none good is so cheap. Assistants should be impressed with the necessity of having clean clothing and clean hands, and it is always well for both operator, assistants, and nurses to wash their hands and forearms well in turpentine, and afterward in a solution of washing-soda. A basin of clean, warm, carbolized water should stand by the side of the operator, in which he may at any time rinse off his hands.

"No hospital assistant is a safe man if he is careless personally or permits those under him to be so.

"From all intra-abdominal operations, menstruating nurses should be excluded, and all nurses present should be scrupulously clean as to hands and clothing. They should receive sponges from the operator and his assistant only upon plates, and convey them thus to and from the nurse who washes them. All surgical dressings should be kept in covered glass jars or tight tin cans, and never be exposed unnecessarily, and they should be in the care of one person accountable for their condition. Absolute cleanliness of a patient's apartments and bed is a long-established necessity. When the operation is intra-peritoneal, greater safety will be found in as few assistants and spectators as possible.

"On the continent of Europe, Listerism, and the cleanliness accompanying, is seen everywhere. It is modified as to spray by some operators. Thus, Billroth drops the latter during operation; so with Langenbeck and Volkmann. They all use irrigation extensively. Nussbaum, Schröder, Küster, and Martin are Listerists.

"The most careful antiseptic surgeon in Europe is Esmarch. He uses both spray and irrigation, and the peat dressing and decalcified bone drains of Neuber, his first assistant. The spray in Esmarch's clinic is

produced by a current of air instead of steam. Drainage is carried out carefully everywhere. With Esmarch and Neuber, the decalcified bone drain is used; with others, glass and rubber tubes. To secure freedom from infection, the tubes are kept, until used, in carbolized solutions."

Within one year after writing the above, carbolic acid was absolutely banished from all my intra-abdominal operations, and has remained so. Nor has any germicide been substituted in the sponge-water or instrument-bath. I had learned that carbolic acid produced congestion of the kidneys and higher temperatures, and that the patients did better without it. Moreover, I had seen ligatures boiled in a 5 per cent. solution of carbolic acid and placed upon the pedicle, and their application afterward followed by suppuration and then discharge through the abdominal wound.

Mr. Lawson Tait's experience I here append; a portion of his address before the Surgical Society of Ireland.

"1. The use of the spray, which I looked upon as by far the most important, since it covered the whole time of the operation, was absolutely consistent with the theory of the system, and seemed to me, from that point of view, of infinitely greater importance than all the other details put together.

"2. The preparation of sponges, ligatures, instruments, etc., previous to the operation.

"3. Details of occurrence during the operation, such as washing out the peritoneal cavity, etc.

"As carbolic acid is the substance to which Mr. Lister has consistently adhered throughout the whole of his work, and as it is that of almost universal acceptance, my remarks are to be taken as applying solely to it. I found, previous to this research, that the substance thymol, introduced by Mr. Spencer Wells, was too dangerous to be used, and the results of my research have seemed to me too conclusive to have any need for further experiment.

"In order to secure the complete performance of my research, I went to very great trouble about the apparatus, especially about the spray-producer. I had a very large one constructed, which would produce a continuous jet of spray six feet long, and having a base of nearly four feet in diameter, and this could be continuously maintained for about three hours. The spray used at first was from a solution of one in twenty, then one in thirty, then one in fifty, then one in eighty, then one in a hundred. I then tried one in a thousand, and after that I went on with a spray consisting of nothing but steam and common tap-water, and my patients recovered as satisfactorily without the carbolic spray as with it; in fact, I may say that they recovered better without the carbolic acid, for, whilst using that substance in a strong spray, I had several indications of carbolic poisoning, and I very nearly lost one case. This was in the instance of a child, upon whom I operated for pelvic abscess under a spray of one in thirty. Within a few hours after the operation, her urine became quite black from indican, and loaded with albumen. She became unconscious, and finally had severe convulsions. Within forty-eight hours all these symptoms passed off, and she made a perfect recovery.

"At the beginning of my research, I had all my instruments completely covered in baths filled with a solution of carbolic acid—one in twenty—my sponges carefully cleansed and similarly covered, my ligatures scalded and soaked in the same solution for many hours before the operation, my hands and arms and those of my assistant carefully washed and rubbed over with the solution, and every preliminary detail most carefully carried out.

"Then, as with the spray, I slowly and at intervals reduced the strength of the solution, and finally I went through all the performances entirely without carbolic acid. In the same way with the details which came into use during the performance of the operation. Thus I used to sponge out the cavity of the abdomen with a solution of one in twenty, but now I use only tepid water, without carbolic acid at all; and, in cases where there is troublesome bleeding from separated adhesions, I pack the cavity with sponges—as many as twenty at a time—without any carbolic acid in them; or I wash out the cavity with two or three buckets of warm water poured in from a ewer, utterly regardless of germs in either air or water.

"This research occupied nearly two years, and all through that time I was carefully on the watch for either symptoms or results which would arrest me in my experiment, and show me that I was in error, and that I must retrace my steps and re-establish Listerism in my practice. But I found none, and, as all the details of my practice, up to the first of November last, have been published, I need not weary you with them now. Suffice it to say that, since the time when I may be said to have abandoned the practice of

Listerism, I have performed 107 completed operations for the removal of ovarian tumors; and of these there have been only three deaths, or a mortality of 2.8 per cent., besides a large number of other operations for removal of diseased ovaries and tubes, peritoneal and hepatic hydatids, tumors of the uterus and kidney—these having a mortality quite as satisfactory, and a success which has already attracted a wide attention.

"The only survivals of the Listerian method which I retain are the instrument and ligature baths. I keep all my instruments in baths of plain cold tap-water; and I scald all my ligatures in boiling water, before the operation, to get the gum out, and then keep them in cold water. You may ask Why do I keep to this? And I really can say nothing more than that I like to handle the things wet, and I think it prevents the formation of loose blood-clots. There certainly can be no question of germs about it, for the water must contain them in abundance; and I make not the slightest effort to destroy those I believe to be in the air.

"The conclusions I make, therefore, from my research are (1) that the germs which produce the putrefactive changes in dead tissue are harmless when admitted to the peritoneal cavity in the operations such as I perform upon it. The fatal cases of ovariotomy which I have seen since I gave up the use of carbolic acid—three in one hundred and seven operations—were due to the same cause, the production of heart-clot in cases which had been repeatedly tapped; and I believe that, if I were (not?) called upon to operate on cases which had been tapped, my mortality after ovariotomy would almost entirely disappear.

"2. The further conclusions are that none of the Listerian details, nor the system which they constitute in the aggregate, are at all necessary for the proper and safe performance of operations on the abdominal cavity; and that, on the whole, better, and even more, recoveries are made when no carbolic acid is used at all.

"At the International Medical Congress, after the evidence of Dr. Keith and myself upon the matter of the spray, Mr. Lister is reported to have said that possibly in ovariotomy the spray is not necessary. If this is to be accepted as the last utterances of antiseptic philosophy, I can only regard it as another illustration of its marvelous mutability.

"Not six months ago, ovariotomy was quoted as the chief and greatest illustration of the wonders of Listerism; but it happens to be the only surgical area upon which a strict statistical inquiry can be made; and, when that is done, Listerism is found absolutely wanting. If germs are so potent in the case of a lumbar abscess, why do they prove so harmless in my cases of suppurating hæmatocele? If the serous cavity of the knee-joint is so susceptible to septic influences, how does the peritoneum escape? If you cannot remove a cyst of the back without the spray, how do I manage to do without it for a cyst of the belly? If Listerism is essential in removing a piece of dead bone, how is it I can freely dispense with it in removing a slough from the middle of the liver?

"I cannot pretend to answer these questions; they are for Mr. Lister and his disciples. All I can say is, that I do not think they can be answered upon the ground of the antiseptic theory.

"My own explanation of my success is in the direction of accumulated experience and an infinite care over every detail; and I am quite prepared to admit, and I have frequently admitted, that in this direction Mr. Lister's details have done a great deal of good. It yet remains to be proved whether or not an equal success might not be obtained for a series of amputations or excisions, if they were conducted, as my research was, by all the Listerian details being carried out with plain tap-water.

"I do not know, Mr. President, if my remarks fall upon my audience with anything like convincing force; but I am sure you will give me credit for the sincerity of my conclusions, and a desire that they should be dealt with at least as a tentative, perhaps a suggestive, effort.

"Nothing in surgery is final; and, even if the antiseptic theory and practice are all that is claimed for them, I can only urge that we have not yet got to the end of our tether, and that we have a great deal more to learn.

"What you may get out of my paper, I cannot say; but I have had at least this, an excuse for having one of my greatest treats—a visit to Dublin."

Dr. Bantock closes his admirable paper on "Hyperpyrexia after Listerian Ovariotomy" in the following words:

"It only remains for me to add that I have now proved that the claim that has been set up for Listerism cannot be sustained (in preventing pyrexia after operations); that carbolic acid may be introduced

into the circulation in poisonous quantity by means of this method; that when so introduced it manifests its presence by producing a state of hyperpyrexia, and that thus it actually produces too often what it was intended to prevent. And the practical result of all this, so far as I am personally concerned, is that, to meet the evil which to me is so formidable, I have gradually diluted my spray and solutions so as to reduce the whole question to one of *cleanliness*, which, after all, is the true secret and merit of Listerism, and I am happy to say with the effect of very greatly adding to the success of my ovariotomy work."

In a paper entitled "On Ovariotomy," by Dr. Thomas Keith, reprinted from the *American Practitioner*, and kindly sent me by my friend Dr. David Yandell, of Kentucky, I find the following remarks:

"At first our greatest success was with the weak solutions. Toward the end, we got to using the regular solution we use in everything—the five per cent. solution. I had not used this very long when I began to notice that the cases went on quite differently from what they had done before. The night after the operation, we had very often high temperature—104°, 105°, 106°, and once 107°. We had never had anything like that without antiseptics. In the entire two hundred and thirty cases I have referred to, in only two did the temperature rise to 103° the first night, and it never went to 104°, 105°, or 107°. I noticed the difference, and wondered how it could be. I did not then think it was the absorption of the carbolic acid that did it, but I know now that it was. It was after seeing a paper by Bantock that that occurred to me. When I began operating in the theatre at the infirmary, I used the solution strong (Lister's strength), and frequently we had high temperatures in simple cases. In the first case, which was a simple case without adhesions, the temperature rose to 105° the first night. This was clearly traceable to the absorption of the carbolic acid. Then we began to have this rise frequently; so that there was a sort of general order left with the nurses to put on the ice-bag when the temperature rose to 103°, and often, on the first morning after operation when I came in, the ice-bag would be on. We had never had occasion to do this before. I recollect a nurse who had nursed about two hundred cases, had a patient one day with a high temperature, and I sent along some ice and an ice-bag, and she returned word that she did not know how to use them. I had forgotten that she had never had to do with a high temperature. There is no doubt the carbolic acid raised the temperature the first night."

The first thing in Listerism to get its death-blow was the carbolic spray. Now, it went because it was either more dangerous than the germs in the atmosphere, or these germs were harmless. The latter proposition is always true, unless the operation is undertaken in an apartment recently poisoned by some infectious disease. And, in the event of the necessity arising to operate in such an apartment, it should be thoroughly disinfected with burning sulphur, and the patient should be spared the dangers of carbolic acid. Says Keith in the same article:

"Since I gave up the spray, I have not had any high temperatures—never anything like 103° in any case; seldom, indeed, has the temperature gone above 100°. The nurses were astonished at its not rising. I have put an ice-bag on but once since I quit the spray.

"I keep the sponges warm. Of course, I disinfect them in carbolic acid. After the first wash in soda and hot water, they are put into a one-in-twenty solution just before the operation. This is then washed out, and they are put into a solution of one in forty or sixty. Sometimes, however, it should be said, I put them in hot water alone.

"I use ligatures of silk and catgut—catgut for simple things. When I tie the pedicle, it is always with silk. I do not like to do it with catgut. I prepare my own catgut, because in getting it from the makers it is often rotten.

"For the external wound, I use silk for the deep sutures, and horsehair for the superficial sutures. I close the wound as perfectly as I can—as close as if it were a wound on the face. I do not look at it for a week, generally. It is then healed.

"I cover it with carbolized gauze, softened with glycerine, about one in eight, and over that a layer of cotton wool and a flannel bandage.

"I drain more cases now than when I operated under antiseptics. I became just a little timid, because it was an awkward thing giving up the spray."

Enough has now been said to prove that I have but little fear of the entrance of air into the peritoneal cavity. I aim at absolute cleanliness, and believe that, with the excellent hygienic surroundings of my private hospital, and with nurses long accustomed to making preparations for abdominal operations, and a growing experience in operating, that the safety of our patients is con-

served by keeping all chemicals out of their abdomens.

I have seen cases with long incisions, and protracted operations, when left dry and clean, make good recoveries. I have seen a pint of pus escape into the cavity of the peritoneum, and, after being well washed out with simple water, fail to produce a peritonitis. I have had the cavity full of gas from the intestines, and no harm come of it, and no chemical was used. The operator who succeeds best in tying all bleeding points, in washing out the cavity with clean water, and in judiciously using the drainage-tube, will, as a rule, obtain the best results possible. But the great plea for early ovariotomy, excepting in cases of intraligamentous cyst, is the avoidance of long incisions, perplexing adhesions, and the ruining of the health of the patient through the enormous growth of the tumor, or its possible malignancy or subsequent degeneration. Added to this are the dangers of accidents, among which are intestinal obstruction, the bursting of cysts, peritonitis, local or diffused, loss of blood into the cysts, twisting of the pedicle, gangrene or suppuration, and finally the possibility of pregnancy ensuing in the presence of a cyst.

After more than a dozen years of experience and study of these cases, I have yet to see the first woman die when the operation was done before she had been tapped.

The great advantage of early ovariotomy is a prompt and early recovery without damage to the woman.

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THE PREVENTION OF EAR-DISEASE BY CARE IN CHILDHOOD.

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I begin with an obvious fact—the great value of perfect hearing, which, however, is rarely appreciated until it is lost or impaired. One then often suffers intensely, both mentally as well as physically. The frequent misunderstandings and embarrassments to which he is exposed are so discouraging and distressing that he withdraws into himself, and is considered stupid, and possibly finally becomes so. In fact, few physical defects are so powerful in curtailing a man's sphere of action. Numbers come to me feeling the incipiency of this trouble, unconscious as to its causes, which, however, prove to be such as are very simple and easily avoided. It is truly remarkable, when we consider how careless we are with our ears, that they are not more frequently defective. They are being continually exposed without a thought as to their care. This systematic neglect makes it all the more important that the causes of ear-trouble should be appreciated, so that something may be accomplished as to their prevention.

It is especially by proper care in childhood that much of the prevalent ear-disease and consequent deafness is to be avoided; for very frequently the foundation of the trouble is laid in childhood. In children, this organ is in its developing state, and is, in consequence, more liable to disease. This special liability makes it incumbent upon the family physician to acquaint himself with its condition in case anything should occur likely to involve it. It is at this period of life that very serious and chronic ear-troubles begin, troubles which may last throughout life, and be of permanent injury to the hearing. Even though it should not prove to be so severe, yet often at the threshold of manhood there is a consciousness of some deficiency—something restricts the possibilities and forms an additional obstacle in life's encounter. Again, we have slighter cases, which are yet very important. Where the tendency to ear-trouble has been created, the slightest indiscretion is followed by disturbance. It is peculiarly important that the methods of prevention should be impressed upon the family by the general practitioner, as evil results, with the often long and difficult treatment, are thereby avoided. If adult life is reached, and the ears are perfectly sound, we are fortunate, as with ordinary precautions they can almost invariably be kept so.

This paper was designed to call attention to the frequent neglect of the ears of children, when most of the preventive work must be done. Its truths are, however, applicable to all; in fact, it seemed an advantage to make it as general as possible, with the hope that more practical thought would be given to this often neglected branch of preventive medicine.

Poor general health is one of the most important factors in the causation of these cases, and is to be avoided, not for the sake of the ear alone, but for the good of every part of the body.

Colds are the most frequent of the causes of ear-disease. While many cases are occasioned directly by exposure to cold, in by far the majority of cases cold acts by first affecting the throat and nose. As soon as such a catarrh occurs, it is to be treated,

as otherwise it may affect the Eustachian tube and ear. Thickenings and chronic inflammations of the throat and nose almost invariably affect the ears, and require continued care. Should the ears become involved, they should be immediately treated to prevent advancement of the disease. Baring the head when perspiring is an especially common cause of ear-trouble. The hurry to the theatre or to board a car is often the occasion for this among men: the hat being removed either from necessity or for comfort, a slight draught accomplishes the result. A skull-cap would have prevented this. Even the somewhat frequent occurrence of having the hair cut much too close and the whiskers removed is often followed by inconvenience of this kind. When this occurs, the skin is to be washed with alum solution, and afterward well rubbed with a vegetable oil. The vigorous use of a fan is to be discontinued as soon as there is a feeling of stiffness of the neck, or pain or coolness in the mastoid region.

Wet feet, which so often occasion colds, are to be avoided by the use of stout shoes or by wearing good overshoes. The wet ankles obtained by women in rainy weather are to be prevented by having an impervious overdress reaching below the ankles, about two inches longer than the skirts, and by wearing, in addition, water-proof leggings.

Whenever we are liable, while perspiring, to be subjected to draughts of cold air, the wearing of woolens next to the skin is essential to prevention. Sleeping exposed to a draught from open windows or doors, and sudden changes of temperature during the night, is to be guarded against by having an extra blanket or quilt at the foot of the bed.

The low-neck and no-sleeve dress of women should be mentioned in this connection, and it is obvious at once how much harm it can occasion. Women, accustomed to ordinary apparel during the day, undress the upper part of the body for the evening hours, and it is rare indeed that some harm is not done. This mode of dress should be discontinued. The evening-dress of men, while by no means so frequently the cause of ear-trouble, must yet bear its share of blame. When it is worn, it should be over an extra or thicker undergarment.

Driving, by rapidly cooling the body, is sometimes the cause of ear-trouble. The driving-dress should invariably be heavier than the walking-dress. After public speaking or singing, upon going into the open air, a muffler or other neck-cover should be used to prevent evaporation from the neck region. In winter, extra precautions to avoid cooling the neck and mastoid regions are necessary. A muffler or cape is often of value.

Thus far, draughts or exposure of some kind, causing colds, have been mentioned, and for the most part they can be avoided. When colds are present, it is necessary to realize their gravity. During the fevers of childhood, especially scarlet fever, measles, and diphtheria, the attendant inflammation of the throat is usually followed by either actual ear-disease or by weakness and liability to such disease. It is these diseases which give us the most severe of our cases—cases of deafness and very poor hearing, as well as of great destruction of the soft and bony structures of the ear. Much can be done in these fevers to ward off ear-trouble by proper treatment of the throat, the frequent cleansing of the nostrils and the supporting of the physical health; if this is not thoroughly attended to, trouble with the ear will be experienced. Careful prompt treatment will frequently prevent ear-disease and loss of hearing.

Syphilis is quite a frequent cause of ear-disease; patients suffering with it should be told of the necessity of great care. On the slightest evidence of any trouble with their ears, they should consult a physician. Tuberculosis is also a not infrequent cause, but, though by attention to the general health much can often be done to ward off ear-trouble, yet very frequently the ears will become affected.

Ears should be cleansed but rarely, and then with care. Hair-pins should never be used for this purpose; even ear-spoons frequently do harm. Cleansing of the meatus by water should be discountenanced, as the water remains in the ear and often occasions mischief; but, if it is used, the ear should afterward be thoroughly dried. Ear-cleansing is usually not necessary, as nature has, by the gradual expulsion of the wax, made the necessary provision for this. When nature fails, the physician alone should do the cleansing, and remove the accumulated wax.

Swimmers, to avoid the entrance of water, as well as of other foreign bodies, into the meatus, should put cotton in the ear. In addition, they should, when leaving the water, open the Eustachian tube by the effort at forcible inspiration, with the mouth and nose closed, and then, after lightly blowing the nose, force air into these tubes.

The blowing of the nose violently, especially when there is an acute catarrh of the throat or nose, is to be avoided. Proper cleansing of the nose is always valuable.

In this connection, it may be stated that among the most important preventations of ear-trouble is the keeping of the nasal passages perfectly free and clean. This cleanliness of the nose is rarely impressed upon children, but it cannot be too carefully observed. Foreign bodies that may be in the external canal should be removed at the earliest moment.

The long-continued subjection of the ear to high and shrill musical notes is often harmful to it. Brass instruments, emitting high notes, are the most to be feared; but the continual repetition of high notes, as in scale-practicing on the piano, is not invariably harmless. When practicing of this sort is necessary, it should be abandoned when sensations of fulness or of buzzing appear in the ear; but, if practice is continued, cotton should be used in the ears.

The striking of children about the head, and the pulling of the ears, are, of course, bad for many reasons; but it is especially necessary to avoid them to prevent ear-thickenings and ruptures. Many a patient with serious ear-trouble attributes it entirely to this cause.

Habitual late hours have a bad effect upon the ears of some. Of course, if there is the slightest evidence of the existence of this cause, the sleeping hours should be lengthened.

Of the injury which tobacco occasions, much can be said. There are those who are very susceptible to tobacco, especially when it is smoked; on these the absorbed nicotine seems to exert its influence primarily on the auditory nerve and ear-structures. This effect is much more frequent and more marked upon children who are not fully developed. Its effect upon the ears of growing boys is often very noticeable; in children of six or ten years of age, it almost invariably impairs the hearing. Many cases of pronounced deafness have originated from this habit, the mischief being done while the patient was unconscious as to the cause. Children under eighteen years of age should never be allowed to smoke tobacco. In proportion as they grow older does the probability of resulting ear-trouble diminish, but, should the slightest impairment of hearing come on, the tobacco habit should be immediately stopped, as in such cases its effect is always deleterious.

Opium-eaters and smokers often suffer with ear-affections, which are preventable only by the discontinuance of the habit on the slightest evidence of ear-difficulty. Cigarettes, not infrequently containing opium as well as tobacco, are often very injurious. Quinine deafness is to be guarded against by the discontinuance of the drug whenever this is necessary. The excessive use of coffee is to be discouraged. Whenever it seems injurious to the ears, it should no longer be used.

Some occupations are liable to bring with them ear-troubles. It is hard for boiler-makers, workers in match and lead-paint factories, and in mills, as well as those employed where monotonous noises are fairly constant, or where sudden excessively loud noises are occurring, to escape ear-troubles. Much can be here accomplished in the way of prevention by the use of cotton within the meatus, by ear-inflation, and by thorough cleanliness. An easy and effective method of prevention is the regular systematic examination of the ear, for instance, every six or twelve months, followed by treatment, if necessary.

Should at any time any symptoms occur, the ears should be immediately examined and treated.

It will be realized that prevention consists not only in avoiding the causes of ear-disease whenever possible, and, when this cannot be done, in the taking of precautions to forestall the possible effect; but also in immediate treatment, whenever the ear is threatened, with the view of aborting the ear-trouble. When this cannot be accomplished, the effort should be so to limit the disease that the ear suffers the least possible impairment.

The importance of this course, and its great value, must be impressed upon the laity, who for too long a time have believed that "ears will get well of themselves"; that "the hearing will get worse if treated"; that it is "better to allow the discharge in children to continue"; that "it will disappear as the child grows"; or that, anyway, the trouble is slight, as it is "only an ear." Teach them that precautions should always be taken, but tell them particularly that, whenever any ear-trouble is threatening or has appeared, to have it treated immediately, and treated until it is well. Tell them that ear-disease is usually, in its commencement, easily cured; and, if advanced, that it can be greatly alleviated; but, if let alone—as is so often advised by friends, as well as sometimes by the medical adviser—that the result is sure and distressing. If we do this, we will have done our duty, and accomplished at least a little toward alleviating the pain and inconvenience, of which there is always sufficient with us.

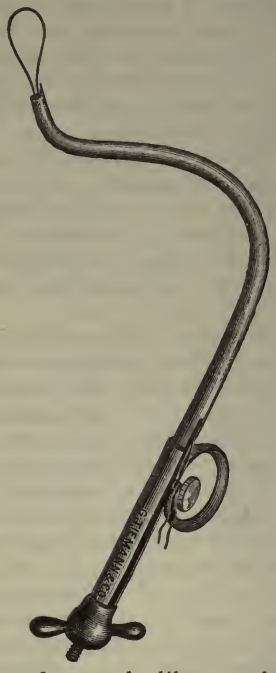
Northwest corner Sixth and Green Sts., Phila.

SOME NEW INSTRUMENTS.

BY A. ADY, M.D.,
MUSCATINE, IOWA.

Uterine Constrictor.

In the operation of trachelorrhaphy as a means of controlling hemorrhage from the cervix, the firm of Tiemann & Co., New York, made for me a simple and inexpensive instrument which answers the purpose admirably, and is not in the way of the operator.



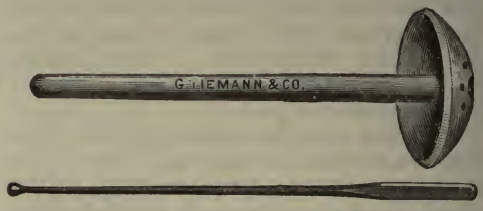
It consists of a canula like a catheter, bent to fit the anterior part of the vagina and hook around the pubes. At the outer end is a screw like that in a light and small écraseur. The loop that goes around the cervix, as seen in the cut, is of twine or fine copper wire (which is the easiest to adjust). To use the instrument, grasp the os with tenaculum, pass the loop over it and around the cervix. One end of the cord or wire being fastened to the peg, pull the other through and give it a few turns around the same; the loop can then be tightened by a few turns of the screw.

The instrument is very light, needs no assistant to hold it, and is easily cleansed.

Elastic Stem Pessary.

In treating uterine flexures or curvatures unconnected with great stenosis, I have had trouble with a rigid stem pessary, which causes irritation of the part. Conceiving the idea that elastic pressure would be the proper mode of treating those as well as flexures of other parts of the body, I applied to Messrs. Tiemann & Co., of New York, who constructed the instrument represented in the wood-cut below. It is made of soft red rubber, of the same shape as an ordinary simple stem pessary, with a flange at the lower end fitting smoothly over the cervix, but perforated so as to allow free discharge of secretions. The stem is hollow, so as to allow the introduction of an elastic stylet of any desired strength the operator may wish, but great force is not necessary. The stylets can be made by any person, whittled out of whalebone or hard rubber, left large enough at the outer end to tightly fill the stem, exclude the moisture, and retain it in place.

In ordinary cases, the stem can be introduced with the stylet in position; but, when the parts are intolerant, the rubber alone can be worn until a tolerance is established, after



which the spring is easily slipped in without the least danger of lacerating or irritating the over-sensitive endometrium. Under elastic pressure applied in this way, curvatures soon disappear. Other pessaries for retaining the uterus in position can be worn at the same time without interfering with this one. When the uterus is in normal position, the vaginal walls exert pressure enough to keep the stem in position. When they do not, pledgets of antiseptic wool or cotton should be used. These stems should be made of two lengths and sizes, 2¼ and 2½ inches long and Nos. 6 and 10 in size. The size and length of the stylet can be made to make quite a difference in their size and length.

The stylet in the above cut is pictured too long: it should be no longer than the cavity in the stem.

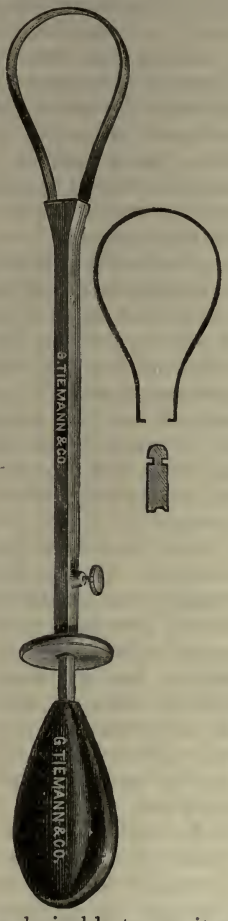
Uterine Tourniquet and Expanding Curette.

This instrument was originally invented and used as an expanding curette and roughly made of a piece of watch-spring and a piece of catheter. This was sent to Messrs. Tiemann & Co. to have a more perfect one manufactured. I thought from their model that it could be used as an improvement on

Emmet's uterine tourniquet, and such proves to be the case.

It is light, small, and can be taken apart for cleaning by turning one set-screw.

We should have several different lengths of watch-spring loops; for the tourniquet, the latter is better made light, but, when used as a curette, it should be of the strongest. In doing Emmet's operation, place the loop around the cervix, tighten it by pushing on the flange to any desired tension, and fasten it by the set-screw; it will not slip off or come loose during the operation. It is very easily controlled.



When it is desirable to use it as a curette, put in a heavier and shorter loop, and draw it back into the canula, when it is easily introduced into the uterine cavity where it can be expanded, by pulling on the flange with the thumb, to any desired extent. The piece of watch-spring adapts itself to the cavity, and, when rotated, will detach anything that may be attached in shape of a secundine, without danger of lacerating the uterine walls.

THE GERM THEORY OF TYPHOID FEVER AND THE THERAPEUTIC INDICATIONS IT SUGGESTS.[1]

BY J. A. ELLEGOOD, M. D.,
LAUREL, DEL.

It is now commonly believed that typhoid fever has for its immediate cause the ingestion and development within the human body of a living germ, and, while proofs to this end are not as yet conclusive, we are in possession of sufficient knowledge to establish this opinion with considerable degree of probability. The presence of special microbes in typhoid fever was first observed by Recklinghausen in 1871; but, for an exact description of this minute organism, we are indebted to the recent researches of Eberth and Klebs. This organism, which they found in a large percentage of the cases examined, and to which they gave the name *bacillus typhosus*, belongs to that group of bacteria called Schizomycetes.

This group was for a long time classed with the vegetable fungi, but recent researches into their organization and reproduction show that they resemble a group of inferior algæ termed *Phycochromyaceæ*, but that they differ from the other members of this group in being devoid of chlorophyl. No sharp line, however, divides the fungi from the algæ, and many families of each are really correlated, inasmuch as they agree in the characters of reproduction and alternation.

Zopf asserts that the same species of alga may accommodate itself to two very different modes of existence. When these algæ are found in water or on damp soil, they exist in the form of plants, and live and multiply by means of chlorophylaceous protoplasm; but, when deprived of moisture, a contraction of the protoplasm in the interior of the cells takes place, forming spores; the cell-walls rupture, and the spores thus set free become air-germs, and are wafted about by the slightest breeze. When these germs encounter a favorable medium, they develop, first, in the form of micrococci, then of bacteria, bacillus, or that of whatever species to which the spore in question belongs. The bacillus typhosus appears in the form of long and short rods, slightly constricted in the middle, and with rounded extremities. They are formed of a thin membrane of colorless cellulose, filled with

[1] Read before the Delaware State Medical Society, Georgetown, Del., June 12, 1888.

a colorless protoplasm. They are about 0 0002 mm. thick, and form filaments up to 0.05 mm. long. They contain vacuoles or spores, and stain easily with methyl-violet. Multiplication is effected by fission, each half becoming of the size and shape of the parent cell and soon splitting again.

The long ones are found only in the intestinal glands, the short ones in the mesenteric glands, spleen, liver, often in the red corpuscles of the blood, and sometimes in the kidneys and urine of typhoid fever patients. They are numerous in the intestines when ulceration of the solitary and agminated glands begins, but become fewer and are succeeded by other microbes as the disease approaches its end.

The bacillus in question is, however, the only one found in the blood and internal organs during the fever, and has never been found associated with any other disease than typhoid fever.

The fact that the bacillus has not been found in all of the cases examined is no proof that the disease is a non-bacterial one; for, aside from the difficulty of the demonstration of bacteria, it should be remembered that post-mortem material is not well suited for this purpose, since the patients examined generally live to an advanced stage of the disease, and, in many cases of bacterial affections, all traces of bacteria have disappeared by the time the tissue-changes occasioned by the invasion are complete. Gaffky, a pupil of Koch, has succeeded in the artificial culture of the microbe taken from the spleen of patients who had died of typhoid fever, and found that it developed actively on gelatine and potatoes. At a meeting of the Medical Society of Lyons, July 27, 1887, M. Rodet presented some slides made from the sediment of drinking-water in places recently ravaged by typhoid fever, and at the same time some mounts prepared from a mesenteric ganglion of one of the deceased typhoid fever patients. In all of them, the typhoid bacillus was present in great quantity, and the bacilli in the sedimentary mounts were identical with those in the mounts of the mesenteric ganglion. Brautelecht found the bacillus typhosus in suspected drinking-water and in the urine of typhoid fever patients. Cultures made from these and injected into rabbits produced fever. Tizzoni also isolated the bacillus in question from drinking-water during a typhoid fever epidemic; injected into rabbits, it produced symptoms in many respects resembling typhoid fever, and, in the tissues, the same character of bacillus as that observed in man was found. So far as the characteristic intestinal lesions are concerned, the attempts to reproduce typhoid fever in animals by inoculation have been unsuccessful.

Before a disease can be considered due to the presence of a specific microbe, the four following conditions must be fulfilled (Koch): 1. "The microbe in question must have been found either in the blood or tissues of the man or animal which has died of the disease."

2. "The microbe taken from this medium and artificially cultivated out of the animal's body must be transferred from culture to culture for several successive generations, taking the precautions necessary to prevent the introduction of any other microbe into the culture, so as to obtain the specific microbe pure from every kind of matter proceeding from the body of the animal from which it originally came."

3. "The microbe thus purified by successive cultures and reintroduced into the body of a healthy animal capable of taking the disease ought to reproduce the disease in question in that animal, with the characteristic symptoms and lesions."

4. "Finally, it must be ascertained that the microbe in question has multiplied in the system of the animal thus inoculated, and that it exists in greater number than in the inoculating liquid."

That all these conditions have not been fulfilled, as regards the bacillus of typhoid fever, is probably due to the fact that the experiments have not been performed upon animals capable of taking the disease, or, if capable, the germ has not been introduced into the system through the alimentary canal. It is well known that certain bacteria produce very different effects, not only according to the animal into whose body they are introduced, but also according to the part of the body into which they are injected. Since circumstances indicate that the cause of typhoid fever is introduced into the body through the medium of ingesta received into the alimentary canal, it might reasonably be supposed that the intestinal glands represent the points of invasion and local settlements of the germ, and afford the conditions most favorable to its existence and reproduction. Were the intestinal lesions of trophic origin, they would as invariably be reproduced by inoculation as they are present in spontaneous cases. As further evidence that the poison gains entrance into

the system through these glands and here produces the primary irritation, we have only to refer to the fact that the mesenteric glands most involved are always those most directly related to the ulcerated areas.

The action of the germ as a pathogenic microbe is virtually that of a specific ferment, and the phenomena are of the same order as those which characterize the regular accomplishments of animal life. Like all other forms of life, whether of animal or of vegetable nature, it breathes by absorbing oxygen. It is not necessary, however, for its existence, that the oxygen exist in the form of air, and on this account it is called an anærobic microbe. It is capable of withdrawing from oxygenated substances the oxygen necessary for its respiration, and the decomposition which it excites in organic compounds is in part a consequence of the disturbance of equilibrium resulting from this respiration. Beside oxygen, it requires to be supplied with certain definite nutritive substances, and the mineral salts, alkaline and alkaline-earthy phosphates, nitrogenous substances, and carbohydrates contain elements necessary to its normal development. These substances are decomposed by it under proper adjustment of temperature and of moisture, and what is suitable to itself is appropriated out of these various compounds. The nutritive activities of the bacillus as a human parasite involve disintegration and appropriation of some of the elements of the fluids upon which the tissues depend in the expression of their cell life; and degeneration and necrosis of the fixed cells may be brought about by local settlements of the germ, and in consequence of a disturbance in various ways of the circulation, or because of a special mechanical action exercised upon the ultimate particles of compound matter of which the tissue cells are composed.

The special changes it calls forth are determined by the constitution of the soil upon which it feeds, and by the special nature of its wants. We do not know the nature of the influence which it brings to bear upon the nutrient medium, nor can we formulate the changes it excites. "No one doubts that in organic living cells, whether they be isolated or form an integral part of a more complicated organism, there resides a special force, capable of producing chemical reactions under conditions quite different from those which we employ in our laboratories, and to produce results of the same class.

"This force, which we imagine to be as material as heat, reveals to us its activity by decompositions effected on complex molecules." We may believe that bacteria do not communicate to the organic compounds contained in the juices the same kind of chemical motion as do the tissue cells, and therefore do not give rise to the same chemical changes as the latter.

Since the bacillus is never found in great quantity in the blood, the energy stolen and expended in the performance of its physiological processes and the mechanical traumatism which it effects, will not account for the severity of the ataxia of typhoid fever. A study of the nature and actions of the germ leads us to conclude that the disturbance which it causes represents more of its chemical than of its physical effect, and that this effect is manifested through the production of poisonous substances which have more to do with the genesis of the symptoms than has the mere withdrawal of nutriment. Only a limited portion of the medium from which the microbe withdraws its nourishment is utilized by it in the production of force, and the greater portion of the molecule broken up, now dissociated, seeks other relations and forms new products foreign to the animal organism. Beside these, it probably gives rise to other products of excretive or secretive origin. These substances are but slightly soluble, not easily eliminated, and of toxic character. Those products which result from the disintegration of albuminoid substances are regarded as especially noxious, and their actions are analogous to those of some of the poisonous vegetable alkaloids. From artificial cultures of the bacillus taken from typhoid fever patients, a crystallizable alkaloidal substance has been obtained, whose physiological actions correspond in many respects to the clinical features of the disease. Whether this substance is of a secretory character or a by-product of decomposition has not been determined. The alkaloidal substances formed during the decomposition of albuminoid substances are called ptomaines, from πτῶμα, a carcass, because they were first obtained from corpses and putrescent organic matter. The relation of microbes and ptomaines can be easily demonstrated. By means of a Chamberland filter they can be separated, and, if the microbe be transferred to the infusions of successive cultures so as to purify it from every foreign element, it continues to produce its characteristic ptomaine, which is manufactured completely at the expense of the culture liquid. No ptomaine, however, is developed without its special microbe.

Brieger proposed, for the poisonous ptomaines, the affix toxine, and, adopting his nomenclature, we call the ptomaine of typhoid fever *typhotoxine*.

"From cultures of the typhoid bacillus he obtained the basic typhotoxine, $C_7H_{17}NO_2$, which produced in small animals lethargic conditions with liquid dejecta." The disposal of ptomaines, as well as other products of tissue metamorphosis which accumulate in the system during the fever and which are not eliminated by the respiratory organs, kidneys, and skin, is effected largely by oxidative changes, which give rise to soluble and easily eliminated waste. If oxygen be supplied in abundance to a fermenting albuminous liquid, the primary products of decomposition at once undergo further change. The oxygen oxidizes them as they are formed.

The increase of temperature in typhoid fever involves an increase of organic disintegration without a corresponding increase of constructive metamorphosis, and is due: 1. To chemical changes excited by the parasite itself—phenomena, for the most part, of hydration and reduction. 2. To diminished elimination of caloric—owing to cutaneous capillary contraction and diminished excretion of water. 3. To excess of reactions which normally occur in the body during the acts of nutrition, which excess is the result of the action on the nervous system of the products of bacterial decomposition. It is probable that these products excite nervous impulses which call forth increased metabolism, and that this does not represent a true exaggeration of the physiological process of calorification, but that omissions or changes occur in the relative proportions of that series of actions by which, in health, the two constant movements of composition and decomposition are accomplished. In consequence of this, there is in the system an accumulation of products of imperfect disintegration which are still capable of contributing to organic synthesis and the formation of new cells, and which have not reached the limit of splitting up at which they naturally become excrementitious.

It appears that the accumulation of these products in the circulation, which are sometimes called leucomaines, gives rise to separate and additional disturbance.

Until a comparatively recent time, the increase of temperature in typhoid fever was supposed to be secondary to increase of organic oxidation. It is now known that oxidation is not the exclusive source of animal heat and febrile pyrexia, but that in typhoid fever, in comparison with the other reactions which take part in the production of the pyrexia, oxidative changes undergo a remarkable diminution—a diminution much greater than that for which the reducing agency of the bacillus will account.

It is also known that the chemical reactions which accompany the transformation of proteids and their immediate derivatives are, for the most part, phenomena of hydration, and "that disassimilation is accomplished by the successive acts of which the first are hydrations and chemical combinations, which give rise to products which are only secondarily overcome by oxidation, and that animal heat results from the *ensemble* of all these reactions." To determine the relative diminution of the oxidation of the nitrogenous elements in fever, the quantity of urea eliminated is compared with the total quantity of urinary solids, and these proportions with those which exist in health.

We know that typhoid fever is a self-limited disease, but what determines its duration we do not know positively.

Although we cannot deny that susceptibility to the disease is increased through the agency of influences which tend to lower the general condition of vitality, the history of epidemics leads us to believe that the conditions fit for the existence and growth of the bacillus are ever present in the system, and that all that is necessary for the development of the disease is its introduction into that part of the body which it especially invades. The relation which age bears to typhoid fever is in proportion to development or condition of the intestinal glands, which undergo ulceration during the disease. It has been stated that the glands of Peyer are most fully developed at puberty and begin to disappear after adult life, and that traces only of their existence are apparent after forty-five. Post-mortem examination of victims of typhoid reveals less extensive abdominal lesions in young children and old persons, and there is little doubt but that immunity from repeated attacks is great, and the severity of such cases less, in proportion to the previous destruction of these glands.

The therapeutic indications based upon the germ theory are: 1. To destroy the germ; 2. To combat its effects.

Although it may seem that the problem of destroying the germ may not be so difficult, provided the opportunity of treatment is early offered, we are, nevertheless, as yet,

in view of our imperfect knowledge, unable to destroy directly the morbific organism which gives rise to the disease, when once it has gained access into the body.

Since the ataxic symptoms of typhoid fever are secondary and usually proportionate to the elevation of temperature, the primary aim in combating the effects of the germ is the reduction of fever and the restraining and regulation of organic disintegration, to the exaggeration and modification of which the pyrexia is mostly due.

Reduction of temperature is accomplished—1. By the external application of cold; 2. By the internal administration of antipyretics. The application of cold affects not only the abstraction of heat from the body, but promotes the regulation of organic disintegration, and tends to restore the normal process of heat-production by increasing the absorption of oxygen. Frédéricq has shown that "cold, when acting upon the cutaneous surface of man, augments manifestly the ratio of oxygen absorption and carbon-dioxide production"; and Quinquaud, who has carefully studied the action of cold and heat on the chemical phenomena of nutrition, has also arrived at the conclusion that cold baths augment the absorption of oxygen and the activity of interstitial combustions.

Cold baths probably promote absorption of oxygen by the reflex stimulation which they exert on the nervous system, and, as previously stated, oxidation diminishes the formation of ptomaines and the products of defective disintegration, and assists in the elimination of those already formed. It is obvious, then, that much good can be accomplished by the use of agents which set free or favor the absorption of oxygen. Among the agents which fulfill this indication are alcohol, the salts of organic acids, the free ingestion of liquids, and the inhalation or rectal administration of pure oxygen.

Antipyrine and antifebrine, the internal antipyretics most extensively employed, neither affect the special cause of the fever nor assist in the removal of the incompletely-oxidized organic residue. They diminish nitrogenous disintegration probably by depressing the power of the cells of the heat-centre to respond to stimuli, or by lessening the power of the afferent nerves, or those portions of the cord which transmit the impulse from that centre. The next indication is to repair the destruction and degeneration of tissue and the promotion of nutrition by judicious alimentation.

In concluding this paper, the writer desires, for the promotion of science, and thereby the good of humanity, to make the following suggestions:

1. That a national or international experimental commission be appointed to make investigations, with a view of determining the cause and best method of treating typhoid fever.

2. That, in addition to the lower animals, human beings be made the subjects of experiment.

3. That, in order to obtain human subjects for experiment, criminals sentenced to capital punishment or long terms of imprisonment may have their sentences commuted, and that, instead of suffering the usual penalty of their crimes, may become the subjects, for a specified time, of experiment.

4. That no one be chosen who is not a voluntary offering, and that no one be subjected to tortures or absolutely fatal experiments.

PERISCOPE.

Diuretic Action of Strophanthus.

At the meeting of the Biological Society of Paris, June 9, 1888, M. Lemoine, of Lille, stated that polyuria is the most constant of all the effects produced by strophanthus. He has always determined this by giving the tincture of strophanthus to healthy persons. Five or six drops are sufficient nearly to double the quantity of urine in forty-eight hours. He has nearly always secured diuresis in patients with heart-disease, unless they were in a condition of complete asystole, when strophanthus is at times, though rarely, incapable of bringing about diuresis. It fails especially when there is extensive pulmonary œdema and great embarrassment of the pulmonary circulation.

It is a singular fact, he says, that the diuretic effects of strophanthus persist for a very long time after it has ceased to be administered. The urine decreases to the normal amount only by insensible degrees. Fifteen days after the drug has been stopped, the patients still pass two quarts of urine, although when they were taking strophanthus the daily quantity was three quarts, and before treatment only about thirteen ounces.

M. Lemoine does not think that strophanthine gives as satisfactory results. In three patients, tincture of strophanthus has occasioned a profuse serous diarrhœa, which was controlled only by stopping the drug.—*Bulletin Médical*, June 13, 1888.

Cancer of the Larynx.

At the meeting of the Société Française d'Otologie et de Laryngologie, April 26, Dr. J. Charazac, of Toulouse, related a case of cancer of the larynx, and made some remarks on the treatment of that disease. The patient, a healthy man, aged sixty, had for years been subject to frequent attacks of hoarseness, and he had besides been an immoderate smoker. He had never had syphilis, but it may be worth mentioning that his wife had died some years before of cancer of the breast. For eighteen months before he came under the notice of Dr. Charazac, he had suffered from persistent aphonia.

On October 1, 1887, the epiglottis and the left side of the larynx showed the ordinary signs of chronic laryngitis; on the right side there was a deep ulcer with grayish base occupying the centre of a swelling which involved the ventricular band and reduced the glottis to half its natural size. Dr. Charazac diagnosed the affection to be malignant, and proposed laryngectomy, which was declined. On February 19, tracheotomy became necessary, and the disease has since made steady progress. The most troublesome symptom at the date of the report was the passage of food into the larynx; this was found to be due to the fact that the tumor, as it increased in size, pushed up the epiglottis so as to interfere with its action in swallowing. In discussing the treatment, Dr. Charazac compared the results of simple tracheotomy with those of extirpation of the larynx for cancer. Statistics showed that the former increased the average duration of life by six or eight months, while after laryngectomy two-thirds of the patients died either from the immediate effects of the operation or from rapid recurrence of the disease. This discouraging result is, however, in Dr. Charazac's opinion, due rather to the want of a proper selection of cases than to any inherent fatality in the operation. He thinks that, as a rule, it should not be performed in patients over seventy, and he looks upon it as absolutely contra-indicated in all cases in which the glands are affected or the general health impaired. It should never be done unless the disease is strictly limited to the interior of the larynx, but in suitable cases early operation is imperative. If these rules are adhered to, Dr. Charazac believes that laryngectomy will prove much more successful in the future than it has been up to the present time.—*British Med. Journal*, June 30, 1888.

Rare Case of Eclampsia.

At the meeting of the Obstetrical and Gynecological Society of Paris, June 14, 1888, M. Charpentier said that on May 17 he was called to see a young primipara six and one-half months pregnant, who had been taken on the preceding night with eclampsia. He was informed that toward the end of the fourth month the patient had suffered with œdema of the lower limbs and that the family physician had discovered a considerable quantity of albumin in the urine, and had advised a milk diet. This advice was not followed.

On the night of May 16–17, she had a violent attack of eclampsia. The following day, when M. Charpentier saw her, there was enormous œdema, marked dulness, and embarrassment of speech. Heat showed abundance of albumin to be present in the urine. The temperature was normal; the pulse 80. She was ordered milk diet, and given chloral. The next day, the albumin had considerably diminished, but there appeared great pain at the pit of the stomach. The fœtal heart-sounds were absent. Chloral and morphia were given. During the night of May 19–20, there were three convulsions at intervals of half an hour. On the morning of 20th, acute epigastric pain and headache were present. On the 21st, the symptoms improved a little, but, by the 22d, there was trouble with vision. The next day, improvement occurred and persisted. On June 2, the patient was delivered of a fœtus, which was dead and macerated.

The interesting points about the case are that the woman took no precautions to avoid the serious danger to which she was exposed, the small number of convulsions, the death of the fœtus from the first convulsion, normal temperature throughout, the appearance, after the attack, of symptoms usually regarded as prodromic—*Bulletin Médical*, July 8, 1888.

Entrance of Air into a Vein.

At the meeting of the Surgical Society of Paris, July 4, 1888, M. Reynier stated that very recently, while removing a tumor from the carotid region of a young man, he heard a gurgling sound, such as air produces as it enters a vein. For two days, no accident occurred; but, on the third day, the bruit was renewed, and was followed by sudden death. At the autopsy, M. Reynier found a hole in the jugular vein, and a considerable quantity of air in the vein.—*Bulletin Médical*, July 8, 1888.

Atypical Varieties of Lupus Vulgaris.

At the meeting of the Academy of Sciences of Paris, July 16, 1888 (*Gazette Hebdomadaire*, July 27, 1888), M. Henri Leloir read a note upon the atypical varieties of lupus vulgaris, and expressed the opinion that these, as well as the classic form of the disease, should be regarded as attenuated tuberculosis of the skin. He recognizes three atypical varieties—the colloid, the mucoid or myxomatous, and the sclerous, which are so named by reason of the characters which they present. He uses the word "attenuated" tuberculosis because (1) these forms contain few bacilli; (2) infection of an animal occurs much more slowly than if true tubercle is employed; (3) unless very large particles of lupus are inoculated, the inoculation may be negative.

He thinks it is important to recognize these atypical varieties of lupus in order to avoid errors in diagnosis.

Rapid Method of Using Fehling's Test for Sugar.

In a communication to the *New York Medical Journal*, July 7, 1888, Dr. Walter Mendelson says that everyone who has critically examined many specimens with Fehling's solution will have noticed two striking facts. The first of these is that some urines from which sugar can by various tests be positively excluded will decolorize the solution, and even give it an orange or opaiescent-green tint. The second is that urines known to contain sugar fail to produce a characteristic precipitate with Fehling's test, giving instead appearances identical with those just described, or filling the test-tube with a precipitate usually of a yellowish-green color, which never turns red and never satisfactorily settles to the bottom, and which is, moreover, so fine as to pass through most filters. The reason for these disturbing variations from the classical action of the test, as described in the books, is to be found in the fact that urine contains normally two classes of bodies, one of which has the power of reducing copper oxide, and the other of redissolving such oxide when from any cause it has been reduced. We have then, he says, two substances of antithetical action, the final result of their presence depending upon which preponderates in quantity. The less sugar the specimen contains, the more disturbing these variations become, and it may happen that as much as one-half of one per cent. of sugar is present without a characteristic precipitate being formed. Concentrated high-colored urines are, as a rule, more apt to show these peculiarities than dilute pale urines. Two kinds of error are consequently likely: One that traces of sugar may be overlooked, the other that traces may be reported in urines containing none.

To avoid these difficulties, he advises the following procedures: First, use a flask capable of containing about 250 c. c. (8½ oz.), and, after adding the usual 10 c. c. (160 minims) of Fehling's solution, fill half full of water, or until the solution is of a very pale blue. The reaction takes place much better and can be more closely observed than when the test solution is used in concentrated form. Second, the urine should be well diluted. Make a preliminary qualitative test to judge approximately of the quantity of glucose present and dilute accordingly. One in ten is a convenient strength. This, together with the thinning of the Fehling's solution, will insure proper dilution of the normal reducing and dissolving substances of the urine, and minimize their disturbing action. The temptation to use the urine but slightly diluted or of full strength when the amount of sugar is small, so as to shorten the time necessary in using the burette, is very great, but will always be regretted if yielded to, for it generally ends in compelling one to undertake the whole analysis afresh after wasting considerable time.

Put the diluted Fehling's solution on to boil while preparing the dilution of urine and filling the burette. Then, when all is ready, in starting the process, allow only a small quantity—from one-half to one c. c. (8-15 minims)—to flow from the burette before boiling again, removing the flame and allowing the ebullition to cease each time before adding more. *Boil hard* each time, as this causes the particles of oxide to cohere and fall to the bottom more quickly than otherwise.

Even under the most favorable circumstances—that is, when a red precipitate appears at once and falls quickly to the bottom as the reaction nears completion—a considerable time must always elapse before the supernatant fluid is sufficiently clear to allow the analyst to determine whether all the blue color has been discharged or not, especially as the fine particles of red oxide, when in suspension, give to an otherwise colorless fluid a violet shimmer. This settling may be hastened by adding a dash of cold water to the

contents of the flask; but Munk has devised a method which is probably the greatest improvement in the use of Fehling's solution since the test was first proposed, and which Dr. Mendelson desires to popularize. This improvement consists in adding a small quantity of a solution of calcium chloride to the mixture in the flask. (Munk recommends three to five drops of a 15 per cent. solution, but in practice Dr. Mendelson simply makes a pretty strong solution, and uses as much as seems needed.) A voluminous, white, curdy precipitate is formed, consisting in part of calcium hydroxide and in part of calcium tartrate, the latter being less soluble in hot than in cold solutions. This precipitate, from its curdy gelatinous nature, carries down with it the impalpably fine powder of the copper oxide, and quickly leaves a clear supernatant fluid in which the most delicate shade of blue is discernible, if present.

In practice, Dr. Mendelson has found the following the best mode of procedure: If the oxide comes down red in the beginning, he continues adding from the burette until the rapid falling of the precipitate to the bottom of the flask warns that the reaction is nearly complete. He then adds about ten drops—or enough to give a pretty large quantity of precipitate—of the calcium-chloride solution. When the precipitate of copper is yellowish-green and shows no sign of turning red, he adds the calcium-chloride solution as soon as he has satisfied himself of the latter fact. Great care, he says, must be used to boil slowly at first, allowing the flame of the burner to play gently, with frequent removals, about the bottom of the flask until the whole mass gradually boils. If this is not done, owing to the character of the precipitate, explosive boiling may occur, and the whole contents of the flask be suddenly landed on the ceiling.

When boiling is once under way, there is no more danger of such an accident occurring, and ebullition should be maintained for some minutes before the precipitate is allowed to settle. Should it be found, after the calcium tartrate with the copper oxide has settled to the bottom, that considerable copper still remains in solution to be precipitated, it will generally be necessary to add from time to time, as the urine is run out of the burette, a few drops more of the calcium-chloride solution, as the freshly precipitated calcium tartrate has greater clarifying powers than that which has already been used. Should the amount of precipitate become finally very large, more water should be added to the flask. By the use of this method, he says, a sugar determination may be made in twenty minutes, and several can be done together in even less time each; whereas, under the common method, half an hour would be very short and very exceptional, and an hour or more—depending on the nature of the specimen—nothing unusual.

In conclusion, he says: "Two years' constant use, embracing specimens of all varieties of contrariness, warrants me in heartily recommending Munk's method to all who have many, or indeed any, quantitative determinations to make, and to whom time is valuable."

Caffeine in Heart Disease.

At the meeting of the Therapeutical Society of Paris, July 11, 1888, M. Huchard stated that some time ago he had had the care of a woman 70 years old, who had heart disease of arterial origin, accompanied with complications. Digitalis for a while did good, but eventually failed, so that M. Huchard almost despaired of the patient's recovery. He then tried caffeine hypodermically, according to the following formula:

Benzoate of soda	gr. xlv
Caffeine	gr. xxx
Distilled water	℥xc

M. Sig. For hypodermic injection.

He gave four, five, and six of these injections a day, and under their influence the pulsations of the heart became more energetic, the patient became stronger, and the excretion of urine, which had been nine and one-half ounces, increased to thirty-eight and forty ounces. He believes that caffeine exercises its action especially upon the nervous system.—*Bulletin Médical*, July 22, 1888.

Exstrophy of the Bladder.

At the meeting of the Academy of Medicine of Paris, July 24, 1888, M. Léon Le Fort presented a boy upon whom he had successfully operated for exstrophy of the bladder, a congenital malformation consisting in the absence of the anterior wall of the abdomen at the level of the bladder. He was able completely to cover in the bladder and to make a channel for draining the urine, so that it no longer flowed upon the groin and thighs, but into a rubber receptacle which could be easily hidden under the clothing.—*Gazette Hebdomadaire*, July 27, 1888.

Abscess Outside the Tonsil in an Infant.

Dr. W. Pasteur, physician to the Northeastern Hospital for Children, reports a case of this kind in the *Lancet*, July 14, 1888. He was unable to discover the exciting cause of the suppuration. The region involved was the cellular tissue outside the right tonsil and the tonsil itself. The posterior wall of the pharynx was quite free, and there were no signs of spinal caries. There were no enlarged glands in the neck.

The patient, three months old, was brought to the out-patient department of the Northeastern Hospital for Children last February, with the following history: The infant had been breast-fed, was always fairly healthy, and had been well cared for. Ten days previously, the mother noticed that the child had some difficulty in swallowing, and breathed badly when he was at the breast A doctor was called in, who ordered hot fomentations to the neck. The child became rapidly worse. After three days, a swelling was noticed in the right side of the neck. A week later, the child's condition was so alarming that the mother brought him to the hospital. The patient was a rather wasted, pallid infant, with labored catching breathing, not unlike that in a bad case of catarrhal laryngismus. Swallowing was practically impossible. There was a diffuse deeply fluctuating swelling in the right side of the neck at the anterior border of the sterno-mastoid. The skin over it was moderately tense, but was not reddened. On looking into the mouth, the passage of the fauces was seen to be almost entirely occluded by a large swelling in the position of the right tonsil. By passing the little finger carefully behind this, it was ascertained that the pharynx was perfectly free, and that a distinct fluctuation-wave was also communicable from the tonsil to the tumor in the neck. At Dr. Pasteur's request, Mr. Blake, the house surgeon, made a short incision into the most dependent part of the tumor in the neck, and evacuated three ounces of inodorus green pus. The swelling at the back of the mouth immediately disappeared, and all the distressing symptoms were at once relieved. A probe passed through the wound impinged against the finger on the tonsil with only mucous membrane intervening. The wound healed completely in ten days. The child was kept under observation. He remained absolutely free from all throat-trouble until June 19, when another abscess of the same size formed in exactly the same situation in the course of a few days, giving rise to an identical train of symptoms. The same operation again gave instant relief. On this second occasion, the abscess-cavity was explored with the finger, and its relation to the tonsil clearly established. In the neck, the cavity lay in front of the great vessels.

Transmission of Tuberculosis by Means of Flies.

In the REPORTER, October 15, 1887, p. 517, we published a brief note on a communication to the Academy of Medicine of Paris, by MM. Spillmann and Haushalter, in which they showed that it was possible for flies to carry with them the contagion of tuberculosis. A new and highly interesting contribution on this subject has been recently furnished, says the *Wiener med. Presse*, July 29, 1888, by Dr. E. H. Hoffmann, of Dresden, whose communication is contained in the *Deutsche Medizinal-Zeitung*, No. 57. It seems that Dr. Hoffmann found some flies in a house in which a patient had died with advanced tuberculosis, and whose sputum had contained great quantities of tubercle bacilli. These he took home and subjected to examination. Tubercle bacilli were found in their intestines, at first in larger and subsequently in smaller quantities. Their excretions, which covered the walls of the house in the form of numerous specks, also contained tubercle bacilli. Dr. Hoffmann prepared the specimens by carefully taking a speck of fly excrement from the wall with a platinum needle, and rubbing it with water upon a cover-glass. In no preparation obtained in this way did he fail to find the bacilli. As often as he had before examined flies in his house, he never had been able to find bacilli in either their intestines or their excrement. On the other hand, he fed some flies, which were apparently healthy, upon tuberculous sputum, and found that, in a few days, a large number of the flies died, so that the chandeliers were covered with dead flies.

To determine the vitality of the bacilli transmitted by the flies, he inoculated them into the anterior chamber of the eyes of guinea-pigs. Of five experiments, four were without result. In one, however, the success was complete: at the autopsy, a large number of fresh small tubercle nodules were found in the lungs, liver, and spleen, while the bronchial glands were swollen. The question of the vitality of the bacilli transmitted by flies must, therefore, be answered in the affirmative.

Slow Facial Palsy in Fractures of the Petrosa.

A. Demoulin, in a series of papers on this subject (*Gazette Médicale*, July 7, 14, and 21, 1888), finds that facial palsy in fractures of the petrous portion of the temporal bone may be slow in making its appearance. In such cases, it should be referred, he says, to the compression of the nerve by swelling of the periosteum which lines the aqueduct of Fallopius, at the time when the work of repair is going on. Increase in the volume of the nerve itself, occasioned by congestion, should also be taken into account. This slow facial palsy is always slight, and its prognosis is always favorable. In case the diagnosis of fracture of the petrosa is held in suspense, the appearance of slow facial palsy makes it possible to affirm the existence of fracture.

Etiology of Vulvo-vaginitis in Children.

At the meeting of the Second Congress of the German Gynecological Society, at Halle, May 26, 1888, Dr. Pott, of Halle, stated that among 18,074 children treated by him from April, 1876, to April, 1888, there were 8,481 girls. Of these, 86 suffered with vulvo-vaginitis. The numbers corresponding with the periods of life were as follows: Up to 5 years of age, 56; from 5 to 10, 23; from 10 to 15, 7. The origin of the affection, he said, was partly referable to local causes (such as uncleanliness), and to skin-eruptions, such as herpes, eczema, impetigo; and partly to dyscrasia, acute exanthemata, tuberculosis, scrofulosis, or syphilis. The oxyuris vermicularis was also a frequent cause. But these causes can, according to Pott, only be occasional; generally, he believes, there is a specific transmissible disease. He has observed cases in which several children of the same family were affected, in which the mother and father were affected at the same time. The father had, in this case, either suffered with gonorrhœa before, or was at the time suffering with it. Epidemics occur in hospitals, and even in boarding-schools. Cases in which defloration was the way of infection were rare. He mentions that in many countries the superstition prevails that a man infected with clap can be cured if he have intercourse with a virgin. Dr. Pott is of opinion that the poison of gonorrhœa is the sole cause of vulvo-vaginitis. Both he and others have demonstrated gonococci. Children, he says, acquire clap (1) directly through coitus, or contact with a penis when there is a gonnorhœal urethritis; this must occur rarely. (2) Infection may occur in the passage of the child through the vagina at birth. This must be rare, though he says it is possible; blenorrhœa would occur much more easily. After birth, in the first days of life, children acquire clap from the infected finger, from sponges, from linens, or the child may get it by sleeping with its parents, if they have it; through contact with soiled bed or body linen; children handle and play with their sexual organs, and in this way the child may infect herself. Again, several children may sleep together, and in this way reciprocal infection occur. He does not think that vulvo-vaginitis is a symptom of syphilis, but admits the possibility of a double infection being present in the same case—congenital syphilis and acquired gonorrhœa. As to treatment, he advises corrosive sublimate and iodoform.—*Deutsche med. Wochenschrift*, July 26, 1888.

Acrania.

Dr. J. F. Lockwood, of Batavia, Ill., reports, in the New York *Medical Record*, August 18, 1888, the following case: "Mrs. S——, a native of Sweden, primipara, gave birth to an acephalic female child. It was still-born, and there was no response to the artificial efforts, yet quickening was felt to the last by the mother, and I myself, while manipulating, felt muscular effort on the part of the child. It seemed to be at full term, *i. e.*, otherwise fully developed. The peculiar features of the case were as follows: First, as to the conduct of delivery. I could not feel the parts of the child with my finger in the vagina, although the os was well dilated and the bag of waters was prominent and easily ruptured. The amount of amniotic fluid was very great. After the rupture of the membrane, the breech presented and was delivered at the end of four or five hours. The cord was coiled once around the right leg, just above the knee. I anticipated trouble in delivering the head, but found no opposition to its passage, for this stage was soon completed, and the explanation came with it. There was no skull and no scalp. The hemispheres were small and unprotected, and the outer integumentary covering to the spine was also lacking. I suppose the removal of the pressure from the exposed and partly-developed cerebrum was the cause of death."

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YELLOW FEVER.

Amid the alarm and distress caused by the present outbreak of yellow fever at Jacksonville, Florida, it would be well, we believe, for medical men to exert themselves to allay the fears of their fellow-men as much as possible. When this disease breaks out, the number of its victims is increased by panic and lessened by calmness and common-sense. Yellow fever is an infectious disease and not a contagious one. There is evidence enough that all persons exposed to the conditions which give rise to it are liable to contract it; but there is no good evidence that those who are at a distance from the place where these conditions exist are liable to contract it from persons already suffering with it, or from clothing or other *fomites*. Persons who have had experience in yellow fever epidemics are generally agreed that the disease is not contagious in the true sense of the term, and it is important that medical men should not allow this fact to be lost sight of. Unfortunately, however, we cannot see much evidence that this view is held by some who might use it with the greatest effect. As an illustration of our meaning, we would refer to what is now going on in connection with the U. S. mails. Under order from the proper authorities, the letters coming from Jacksonville are now subjected to what is called a process of disinfection. This process is utterly useless, if it is regarded as a process of disinfection, and furnishes a wonderful example of the absurdities sometimes practiced by health authorities. If the futility of a process of disinfection is recognized by those who have ordered it, it can be justified only on the ground that it is intended to allay the popular dread of yellow fever. But it would be far better, in our opinion, to teach the community that there is no reason to believe that yellow fever can be communicated by means of a letter, than leave them in error on the point, and dupe them with a show of disinfection, the hollowness of which is in danger of exposure at any moment.

It is to be hoped that the present outbreak of yellow fever will yield some useful fruits of knowledge in regard to its nature and operations, and that those who are bravely combating it will be able to clear up certain points which are still confused in the minds of medical men. Among these points none is more important than the mode of its communication; and we heartily wish that those who can speak from personal observation would unite to impress on the minds of the community the fact that yellow fever is not a contagious disease, and that those officials who have charge of the public health would shape their protective measures so that they would not lend support to the erroneous view that it is contagious. This, we think, would do more good than all the fumes of sulphur, or the detonations of artillery, with which medical men or the laity may endeavor to stay its devastating march.

PREVENTION OF CONCEPTION.

There is no subject in the wide domain of medical practice which is of more general interest in civilized lands, or which demands more discretion in its consideration, than the question of the propriety of preventing conception in the state of wedlock. In most English-speaking countries, this subject is rarely discussed, and, when it is discussed, this is done with considerable misgiving as to the opinion in which not only the argument but also the arguer will be held by wise and conscientious men and women. This misgiving is a sort of testimony to the comparative chastity of English-speaking countries; but it is possible that it is somewhat exaggerated, and that even so delicate a subject may be regarded with too much timidity by those whose duties often bring them face to face with disagreeable and even dangerous situations.

No medical man of any experience can fail to know that the propriety and feasibility of preventing conception engages, at some time or other, the attention of a large proportion of married people in civilized lands, and there is danger that an undue dread of discussing it frankly in medical circles may deprive medical men of the means of properly directing a disposition which cannot be ignored, and which, in the present state of human nature and civilization, it seems impossible to eradicate.

The arguments of the disciples of Malthus for restricting the number of children in a family, and of those who accept part of his opinions, although they reject others of them, are founded principally upon economic considerations. But there are other considerations which deserve to be entertained. Among these are some which have been either hinted at, or openly stated, in certain of the contributions published in the REPORTER during the past twelve months, on the "Conjugal Question." The hardships alluded to in those papers and letters devolve upon women as a direct consequence of the practice of monogamy, and are part of the price paid for its manifest blessings. One of these hardships is the liability to too frequent child-bearing. This is perhaps the most serious reason why such complaints are made of the excessive indulgence of the sexual appetite by men, as were communicated to the REPORTER last year. It is not because women have no corresponding inclination to sexual intercourse in itself which makes many of them regard it as a burden or a curse, but because they can rarely rid themselves of the dread of its consequences. To them it always means the possibility of pregnancy, of months of discomfort and often of shame, of the perils of child-birth, of the cares and anxieties of motherhood, and of burdens and responsibilities which are at best only shared by the men. The mere economical considerations which have seemed to many thoughtful men sufficient to justify restriction of the number of children born in wedlock have less weight with women, but the dangers and discomforts of which we have just spoken are, with rare exceptions, ever in their minds, and the question of preventing conception is one which demands chaste, to be sure, but also fearless, consideration as an act of humanity to those who, in our day, bear too large a share of the curse of Eve.

Besides this, however, the limitation of child-bearing is a matter which has an incalculable bearing upon marital and family felicity. The woman who lives in dread of her husband's sexual appetite cannot satisfy him as a wife, and, with this poison in her life, must find it hard to be a kind and wholesome mother to her children.

It will not do to cover up such a state of affairs with euphemisms. Those who know what goes on in the privacy of many a home, as physicians only know it, know that the dread of pregnancy and child-bearing has wrecked the peace of thousands of households, and led to steps of desperation where those who knew less about it never suspected them, or were utterly ignorant of their motive.

Impressed with this fact, we invite our readers to discuss in these pages, as wise and thoughtful physicians, the importance of the prevention of too frequent conception. Opinions may differ as to what constitutes too frequent conception, or as to the desirability of interfering at all with the course of nature in sexual matters, but we believe that a candid study of the subject is an urgent need of the present day, and hope that the REPORTER may do something toward meeting this need, difficult and delicate as the task may be.

TREATMENT OF GENERAL PERFORATIVE PERITONITIS.

The progress that has been made in the last ten years in the knowledge of inflammatory disease in the region of the cæcum is most gratifying, and there is reason to believe that, in the near future, differential diagnosis and treatment, as applied to diseases in this region, will be based upon well-recognized and satisfactory data. It is not our purpose at this time to discuss the radical differences of opinion among operating surgeons as to the proper time and character of the operation for perityphlitic abscess. This difference of opinion, we think, is largely due to conflicting views as to the morbid anatomy of these abscesses, as to whether they are properly classed as cases of circumscribed purulent peritonitis or of true abscess located external to the parietal peritoneum. With regard to a different though allied class of cases, where general or rapidly-spreading peritonitis follows perforation of the appendix or cæcum, or the rupture of a perityphlitic abscess, with the escape of pus within the cavity of the peritoneum, there appears to be general unanimity of opinion. The prognosis of these cases under medical treatment is fatal, and it is only by prompt resort to abdominal section and proper treatment of the conditions found that any reasonable hope of recovery can be offered. The first abdominal section for peritonitis due to non-traumatic perforation of the stomach or intestines was done by Mikulicz in 1880, and reported in 1885; and Weir, in 1887, was able to collect only fourteen additional cases. The operation, from this indication, is but applying to intestinal surgery the rule which has been followed by gynecologists since Thomas Keith had the courage to operate with success, during the course of a purulent peritonitis, and remove the cause—an ovarian cyst, in which suppuration had been set up by tapping; or extending to spontaneous perforation of the intestine that treatment which is universally conceded to be demanded in traumatic perforations of the bowel.

The recent successful case of Sands, reported in the *New York Med. Journal* of February 25, 1888, brings up this subject anew; and the fact that Sands, well known as an opponent of early operation in perityphlitic abscess, strongly urges the necessity of early resort to laparotomy in perforative peritonitis is at least worthy of consideration. The question as to whether median or lateral section is best in these cases is still debatable. The greater ease with which the median section can be made, the less amount of hemorrhage, and the advantages offered for draining Douglas's cul-de-sac would influence most operators; but, should tumefaction in the region of the appendix be present, indicating circumscribed collections of pus in addition to the general peritonitis, the lateral operation would probably offer superior advantages. Perforations of the cæcum should be closed by Lembert sutures. The same treatment is applicable to perforations of the appendix, but preferably this worse than useless organ should be amputated. This has usually been done by ligating it and cutting it off. It would seem better to close the lumen of the stump by Lembert sutures rather than to use the ligature. Other operative treatment of the bowel will seldom be indicated. After the closure of perforations, the sheet-anchors of success will be free irrigation

and drainage. Valuable time should not be wasted in too vigorous sponging. Perhaps Senn's hydrogen-gas test will prove useful in some cases when an examination of the appendix and cæcum fails to demonstrate perforation.

PHYSIOLOGY AS SHE IS WROTE.

There lies upon our table a little book which has such an appearance of having been published with a commendable object, that we trust the author will forgive us if we use it to point a moral which we believe to be of importance. At the same time, we trust that our readers will see that our desire to make the book of service in a different way from that which the author intended does not require that we should expose his person as well as his work to the gaze of others.

In the REPORTER, April 21, 1888, we called attention to the amusing errors of a translation which had been offered for publication in this journal, but the book before us presents more numerous and as amusing errors by one who wrote in his native tongue.

Since Mark Twain brought again to notice the little "English as She is Spoke," we have seen nothing to compare with this. It appeals to physiologists and physicians; to printers and proof-readers alike. Every page is studded with typographical and grammatical blunders, which are only equalled by the errors of the text, considered scientifically. An author and a publisher so admirably matched are rarely brought together for our delectation. Nouns singular are more commonly given verbs in the plural (or *vice versâ*) than not.

The possessive case was evidently never heard of by either author or proof-reader. There is the most wonderful use and disuse of capital letters—and the abbreviations! The author intended helping us out by prefacing the book with a list of abbreviations, but he tabulated only a small portion of those used. However, we should be glad to know that, in the body of the work, M. O. stands for "Medulla Oblongatta"; P V for "Pons Varoli"; C. S. for "Corpora Striatum"; C C for "Corpus Coilosum," etc., etc. But what lexicon will help us out with such a sentence as this: "The P—— C—— are the articular C—— of bone, the *Costal* C——, of the Larynz and the Nose. White Fibro Cart—— has matrix converted in part into white fibrous tissue. This W. F. C—— are the interarticular cartilages, etc."

A new hint is given the surgeon in the explanation that Torticollis is "rye neck," and horsemen will hereafter profit by the suggestion that "in the horse the presence of pigment in the hoof is an evidence of sagacity, such an animal being trained more easily than one having light hoofs." We have been puzzled to know how the "auricular ventricular opening" could be "closed by a spinster motive." (The word *sphincter* has been a great *pons asinorum* for author and proof-reader, *e. g.:* "The mammary glands are contracted by a spincter muscle at the nipple, which muscle has the same relative function as the spincer aui.") The following sentence may interest physiologists: "The diaphragm has a fixed position on the viscera. from which as a center it acts to pull the ribs up and outward, thus enlarging the thoracic space during inspiration. Where there is no diaphragm, the breathing is done by the nearest muscle, namely the abdominal or perineal. When a plaster paris jacket is applied the breathing is done by the perineal alone."

Our author has the greatest fondness for protoplasm, and uses the word on every possible occasion. "Some protoplasm," he says, "is born tied, and cannot break up the proteids, and emaciation results." An explanation of leanness and obesity is entitled "SEXUAL CONDITION. When the sexual condition is aroused, the protoplasm lingers in the region of the genitals, and the animal consequently grows poor. Castration tends to fatten, because the sexual condition is now destroyed. During lactation the

proteids become milk by the action of protoplasm in the mammary glands."

The ophthalmologist will find in this book more amusement than other specialists, though the otologist, the gynæcologist, the laryngologist, etc., will not miss their share. For example, we find that "an emmetropic eye is an impossibility," that "the distant point of accommodation" arises from "overrelaxation of the ciliary." "Myopia always becomes worse, you never see distinctly. It is caused by overstimulation of the brain and overcontraction of the ciliary muscle, which makes the lens convex." Astigmation "may occur in the vitreous humor." Under the head "Eutopic Phenomena," we are told "these are those which occur in the eye." "A line from the *mascula lutea* through the corner constitutes the visual axis," and "a line from the spot of mariot through the corner constitutes the optic axis."

As to the ear, the author says: "The sensual apparatus is the same as in all the organs of sense"; and the "cochlear" is described thus: "The two canals join at the apex of the cochlear so that an insect passing along the one canal cannot return by the other but must return by the same." "The stapedias regulates the amount of air entering the int. ear and prevents injury from pressure." "The cochlear is supposed to be connected with musical notes." "Noises in the air are painful and depressing."

The section on the larynx ("a respiratory passage like the lungs") is particularly rich. We cannot forbear quoting the explanation of whispering when "a person is aphoseate." "He whispers because he cannot take advantage of the resonance in the frontal tissues from which the resonance is derived. Extirpation of the larynx will destroy speech but the lips can be cultivated, and in this way some persons are very skilful, suspending the action of the cords, at pleasure."

In speaking of respiration, we find the curious statement that the "air of Respiration" is divided into "Tidal air, amounting to 20 cub. in. *per hour;* Complimentary, 110 cub. in. per hour; Reserve, 100 cub. in per hour; Residual, 100 cub. in an hour," while the explanations of "exophtyalmic goitre" and of the pulse are among the wonders of the book.

We might extend our quotations and include what the author calls "a few nervous points"; but we must forbear. Enough has been quoted from this remarkable book to show that something more is needed for one to become a good author than that he should make a book out of notes taken at medical lectures, and attempt to supplement the wisdom of his teachers with ideas which he modestly thinks better than theirs. Except as a source of amusement, this volume has no claim to professional notice; but it may serve a useful purpose if it warns those who aspire to such notice against an error to which the language of Charles Lamb may be applied, who said, of the owner of a certain sort of faculties, that "They seldom wait to mature a proposition, but e'en bring it to market in the green ear."

—The Congress of American Physicians and Surgeons meets in Washington next week. In this connection it is worthy of note that a large number of physicians arrived in New York City, Saturday, September 8, from Liverpool, in the steamship Umbria. Among them was Sir William MacCormac, Chief Surgeon of the St. Thomas Hospital, London, which stands on the banks of the Thames directly opposite the Houses of Parliament. With Sir William, were five other noted English physicians, including Dr. Arthur Edward Durham, Senior Surgeon of Guy's Hospital, London, and author of "The Physiology of Sleep"; Dr. Reginald Harrison, Chief Consulting Surgeon and Lecturer at the Liverpool Royal Infirmary; Dr. William Miller Ord, President of the Medical Society of London, and Mr. Victor Horsley, who has contributed much to the surgery of the brain and spinal cord. Sir William MacCormac says he came here more for rest than anything else, but he will attend the Congress in Washington. Drs. Durham and Harrison became the guests of Dr. Sayre, of New York.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

HYGIENE FOR BASE-BALL PLAYERS. By A. H. P. Leuf, M D, Director of Physical Education at the University of Pennsylvania, etc. 135 pages, 12mo. Philadelphia: A. J. Reach & Co., 1888. Price, 50 cents.

Nothing indicates more significantly the hold which the game of base-ball has taken upon the people of the United States than the amount of literature devoted to it. No daily paper is regarded as complete which fails to chronicle the issues of the daily contests all over the country during the playing season, and magazine articles and books are appearing from time to time to inform the public of the "points" of the game, and players of the principles involved in it. One of the best which we have seen is the one before us, which is intended to give base-ball players scientific instruction in regard to the way in which the various parts of the body act in efficient work. It gives a brief account of the anatomy of the bones and muscles used, a very complete description of the methods employed in modern pitching, and many directions for securing the best results as a player, for avoiding injury, and for treating injuries when they occur. It is written by a physician who is experienced in physical education, and who has, by observation and experience, learned what are the needs of base-ball players. His book may be heartily commended to the attention of all who are interested in our national game, and we believe it is calculated to be of great service to all who take an active part in it.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

The Orthopædic Treatment of Paralysis of the Anterior Muscles of the Thigh. By A. B. Judson, M.D., New York. From the *Medical Record*, February 4, 1888. 8 pages.

Dermepenthesis; Animal Skin-Grafting. By G. F. Cadogan-Masterman, M.D., Stourport, Wales. 7 pages.

Vesico-Vaginal Fistula. By Reuben A. Vance, M.D., Cleveland, Ohio. From the *Cleveland Medical Gazette*, February, March, April, and May, 1888. 35 pages.

Fifty Aphorisms in Pregnancy. By E. J. Kempf, M.D., Jasper, Indiana. From the *American Practitioner and News*. 16 pages.

Certain Facts Regarding Fertility, Utero-gestation, Parturition, and the Puerperium in the So-called "Lower" or "Laboring" Classes. By George Woodruff Johnson, M.D., Washington, D. C. From the *Amer. Jour. of Obstetrics*, May, 1888. 19 pp.

—This pamphlet of Dr. Judson's is principally occupied in describing an ingenious and very simple form of splint which he has designed for cases in which involuntary flexion takes place at the knee-joint as a result of infantile paralysis of the extensor muscles of the thigh. The simplicity and cheapness of the apparatus recommend it strongly to professional favor, and its utility seems to have been demonstrated in Dr. Judson's practice.

—Dr. Cadogan-Masterman, having experienced the difficulty of obtaining suitable human material for skin-grafting, tried, in January, 1885, the effect of using the skin of the rabbit for this purpose. The result, an entire success, and he has now used this material in four cases, and recommends its adoption by other surgeons. From his experience, he thinks the skin of the young wild rabbit the best for the purpose, and he maintains its vitality by the application of moist heat after its application. His method was so successful in his hands, and seems to be so rational, that we hope to be able to present it in full to our readers shortly.

—The writings on vesico-vaginal fistula are not yet quite as numerous as the sands of the sea, but they can hardly be called few; still, a paper as carefully prepared as this of Dr. Vance, and bearing so many marks of intelligent observation and skilful practice, will always be welcome. His pamphlet contains an excellent description of vesico-vaginal fistula, as a lesion, and the form of operation best adapted to cure it. The clear descriptions of the text are admirably supplemented with illustrations, and the whole would be a valuable addition to the library of any physician.

—Dr. Kempf's fifty aphorisms are sensible and calculated to be useful. As he invites dissentients to express their opinions, we may say that some experience inclines the writer to question the advisability of "hardening" the nipples during pregnancy with an astringent solution, and to prefer softening them with some simple emollient. Again, while we cannot gainsay the truth of his fifth aphorism, we think it would be easy to abuse the permission it grants, and would suggest that this may not be stretched without great danger of bringing on an abortion.

—Dr. Johnson's paper contains a very interesting study of the conditions he found in three hundred women belonging to the laboring class, in reference to the exercise of the procreative function. The facts he notes indicate that certain notions commonly entertained in regard to women of the laboring class are erroneous. For instance, that they are usually fertile and prolific above well-to-do women, and that they suffer more than the latter from lacerations and other injuries of the genitalia during labor. Other important generalizations may be made from his address, which deserves the careful attention of all who are interested in its subject.

Literary Notes.

Harper's Monthly was the pioneer among magazines which developed the art of engraving to the high point which it has attained in America. This development has now gone so far that it is hard to see how it can be carried any further. A glance over recent numbers of *Harper's Magazine* shows the most wonderful advance from the productions of the graver in earlier years, and furnishes most interesting evidence of the progressive character of its literary contents. It is saying a great deal to say that it maintains its position in face of the intense competition of some of its rivals, and still stands at the head of the illustrated magazines of America.

CORRESPONDENCE.

Strongulus Gigas.

TO THE EDITOR.

Sir: I have been very much interested in the case of "Strongulus Gigas" published in the REPORTER of August 25, and suspect it is open to an interpretation different from that given by the writer. As he says, such cases are of extreme rarity, so much so that it is doubtful if any genuine case of the occurrence of this parasite in man has been recorded. The *strongulus gigas* as found in animals is much larger than the supposed worms in the present case, attaining a length of three feet. In this case, the enormous size of the right kidney—weighing two and one-half pounds, its resemblance to a fatty kidney, but with no trace of kidney tissue, together with a similar change in the other kidney and the liver, point unmistakably to new growth, perhaps carcinoma. The "worms," according to this view, were blood-casts, such as are passed frequently by patients similarly affected. During the past winter, several such specimens were exhibited before the Philadelphia Pathological Society, one set, if I mistake not, from a case of carcinoma of the kidney.

Hoping this may throw still more light on the subject, I am

Yours truly, GEORGE DOCK.

Manayunk,
August 26, 1888.

Herpes Ophthalmicus.

TO THE EDITOR.

Sir: When reading the account of Dr. Wheelock's case of herpes ophthalmicus, in the REPORTER, December 3, 1887, page 752, I was struck with the similarity of symptoms and sufferings to those experienced in my own person. Though the disease is common here, I had never seen a similar case, nor could my associates remember one; and, when able, I intended to report it. Professor Wheelock's patient was ten years younger than I am, and was a robust man; but, if his sufferings were intolerable, mine were more so, as, during one of my paroxysms, my family thought me past reanimation.

Most authors treat of herpes too superficially; one who has not experienced an attack cannot appreciate its gravity. When it occurs over the cardiac region, death, in my experience, supervenes on or about the fifth day. I have two chronic cases whose duration exceeds over twelve years, and whose neuralgic pains and itchings I cannot relieve. I am using antipyrine, recommended by Dr. Germain Sée, before giving it to my patients.

On April 25, 1887, I felt, on awakening, slight nervous twitchings, branching out from a small dry point on the left upper lid; the twitching was just enough to attract attention. The spot resembled those produced by the exudate of the "matta," an insect pest prevalent at that period of the year. I paid no attention to it during the day. The next morning, my daughter noticed two fine white pimples. The day was passed with an occasional twinge of pain, augmenting in the evening, and branching out over the forehead and temporal region. The next morning, the eyelids were red and swollen, the eye injected; the pain was intolerable, and an eruption extended over the head, face, lips, and into the mouth. There was no eruption nor any inflammation to the right of the median line. There were paroxysms of pain in which the pain extended down both arms to the tips of the fingers; down the spine to the lumbar vertebræ, thence to the toes of both feet, causing numbness. This was succeeded by a pricking sensation, which disappeared under the use of friction. The arms were longer than the other parts of the body in returning to a normal state.

On the sixth day, the viscid serous exudate from a few large pimples, mostly confined to the hairy scalp, lips, and mucous membrane of the upper part of the mouth, had an offensive odor characteristic of the disease; one pimple on the lid was elongated, and, on the eighth day, had formed a thin dark crust, depressed below the surface, and, like the rest, was very tenacious and leathery: it was detached on the twenty-fifth day, with scissors. The face and forehead were covered with fine pimples, which were crusted on the twelfth day. From the eighth to the sixteenth day, the paroxysms numbered ten or twelve in twenty-four hours; then they abated to four or five, disappearing on the twenty-fifth day. They were succeeded by very small ones; when falling asleep, they were still felt, but not every night; they did not pass beyond the fingers. No sensation was felt in the spine, as at first.

The eyes continued to suppurate until late in August. Suppuration was followed by a viscid exudate, continuing until late in February. This was in turn followed by a watery exudate, lasting until May and being sufficient to glue the eyelids during sleep.

The latter still continues, but is about disappearing. A deposit of lymph that covered the cornea was gradually removed by molasses, dropped in twice daily. (Highly recommended to me by Dr. V. Mott, in 1847.) Adhesions were removed by alternate use of eserine and atropine. Eyelids feel stiff, vision is incomplete, owing to a barely perceptible turbidity in the anterior chamber, which prevents me from reading any print.

At first I used cocaine liberally and also solution of boric acid. Iodide of potash was used to mitigate the pain, with slight benefit. Quinine and the most noted tonics were also used, together with electricity, which is being repeated. As Drs. Mabano and Barrios early gave up all hope of saving the eye, I adhered for a long time to the use of powdered boric acid, together with a solution of the same as an antiseptic, and have saved the eye, although it still troubles me. Now, if you can suggest anything to relieve the *itching*, I think the sight might be relieved immediately after.

Yours truly,

EARL FLINT, M.D.

Rivas, Nicaragua,
August 7, 1888.

NOTES AND COMMENTS.

Urethral Discharges.

At the meeting of the Ontario Medical Association, June 13, 1888, Dr. Grasett read a paper on urethral discharges (*Canadian Practitioner*, July, 1888). After referring to the frequency with which such cases are met and the depressing mental effect the condition often has upon the patient, he divided the subject into sections, according to the nature of the discharge. 1. When the discharge is the result of a catarrhal condition of the urethra—urethritis. This urethritis may be: (*a*) Simple, such as that set up by leucorrhœal discharge, excessive or violent coition, or mechanical irritation. This is usually less severe and of shorter duration than (*b*) specific urethritis or gonorrhœa. Whether or not this specific inflammation is always due to the presence of gonococci, cannot be regarded as proved. Experiments have failed to establish that it can be induced by injection into the healthy urethra, and it has not been found possible to inoculate animals with gonococci. Notwithstanding these facts, the almost constant presence of gonococci suggests that they are possessed of causative properties.

The plan of treatment found to be most useful might be summarized as follows: Rest in bed; cleanliness, secured by frequent passage of urine, or by injecting hot water. The patient should be instructed to allow the penis to hang in a natural position, so as to permit the discharge to run out; or a dressing of salicylic gauze might be placed loosely over the end of the penis and covered with a rubber bag. The diet should be light and unstimulating; alcohol and tobacco must be avoided. Alkalies may be given, to keep the urine neutral or slightly alkaline. Injections, except of hot water, are harmful in the first or acute stage. The injections frequently given by chemists do great harm. In the late stages, sulphate and sulphocarbolate of zinc are beneficial in dilute solutions; so, also, is nitrate of silver.

2. Chronic discharge or gleet sometimes persists after an attack of gonorrhœa, in spite of treatment, both internal and external. An error in diet, or indulgence in alcohol or tobacco, will often cause a return to the catarrhal stage. The pathology of gleet probably depends upon the fact that the inflammation, which commences in the mucous membrane, spreads to the submucous tissues, and causes a thickened and granular condition of both. If a stricture is present, it should be dilated. The injections used should be mild and slightly stimulating astringents, and should be frequently changed. Caspar, of Berlin, recommends a combination of mechanical and chemical therapeutics. He uses nickel-plated bougies with grooves, into which he pours a medicated paste, which melts when the bougie is inserted into the urethra. He has used iodoform, zinc, resorcin, and other drugs, but has had the best results from the use of this formula:

Olei theobromæ	100	pts.
Argenti. nit.	1–1½	"
Bals. copaibæ	2	"

No bad effects have been noticed. Improvement begins at once, and the discharge, under the microscope, soon shows a diminution in the proportion of pus-cells.

3. Prostatorrhœa was first accurately described by Dr. S. W. Gross, of Philadelphia. It consists of a clear glairy mucus from the prostate, most frequently seen after straining at stool. It comes from the acini of the gland, and is increased in quantity by disease of the rectum, masturbation, hard riding, etc. Several instances of this condition were cited, illustrating the good results which followed treatment by tonics and the local use of nitrate of silver.

4. Spermatorrhœa, or flow of semen, unaccompanied by sexual excitation or orgasm, is used by quacks and empirics to include nocturnal emissions, which, unless excessive, are an indication of health rather than of disease. If, however, they become too frequent and are followed by depression, they are pathological. The causes are, among others, hyperæsthesia, or irritation of the genitals, inflammation of the prostate or urethra, phimosis, etc. The treatment should be largely hygienic. Avoid alcohol and tobacco, empty the bladder the last thing at night and first thing in the morning, give light diet, keep the bowels loose, and abstain from irritating exercises, such as riding on horseback. Bromide of potash often acts beneficially. If the prepuce is long, circumcise it; if there is rectal irritation, as piles, fissure, etc., appropriate treatment must be applied for them. Passing large bougies, and the local application of nitrate of silver, gr. x or xx to one ounce, are also useful. The depressed mental condition of the patient must not be neglected, as very much depends upon his intelligent co-operation in the treatment.

Use of Creoline as an Intestinal Antiseptic.

Dr. Hiller, of Breslau, in a communication in the *Deutsche med. Wochenschrift*, July 5, 1888, recommends creoline as an intestinal antiseptic and parasitic. Promptness and certainty of action, freedom from danger in that it does not act either as a poison or as an irritant when taken internally, make creoline, he says, the ideal antiseptic for diseases of the stomach and intestinal canal. Dr. Hiller has observed the good effects of creoline in meteorism of whatever cause—stenosis of the bowel, typhlitis, enteritis, habitual atony of the bowel, with constipation, and typhoid fever. The same never-failing action was demonstrated in flatulence, which accompanies acute and chronic colitis, in the fulness and swelling of the epigastrium after food, as a result of disturbances of gastric digestion, and especially in the putrid decomposition of the contents of the bowel in chronic enteritis and colitis. Colitis, likewise, when creoline is used, combined with washing out the stomach, accomplishes brilliant results in dilatation of the stomach, as a result of stricture of the pylorus, overcoming the development of gases and the distressing symptoms occasioned by them. Its prompt and certain checking of the processes of fermentation is also proved in ac[illegible] of the stomach, in simple diarr[illegible] cholera morbus. Hiller emplo[illegible] in doses of from 4½ to 15 grains, generally given three times a day, after meals. On account of its bad tarry taste, he gave it only in strong gelatine capsules. He regards the administration of creoline, as indicated in dysentery, both internally in doses of 7½ to 15 grains, three times daily, and in the form of clysters, of a strength of 15 or 45 grains to 16 fluid oz.; also in carcinoma of the rectum, as a wash, and in cholera morbus and cholera nostras. He suggests its use in Asiatic cholera. Hiller has also employed creoline in one case of tænia solium, and in one case of oxyuris vermicularis (15 grains in gelatine capsule, three times a day) with prompt effect. He says that the drug cannot be employed in practice among children, because it can be taken, in sufficient doses to be active, only in gelatine capsules. In larger children, small capsules containing from 1 to 1½ grains, preferably with honey, may be given.

Hysterical Spasm of the Œsophagus in a Young Child.

Dr. B. D. Foster, of Chicago, in a letter to the *Medical Record*, July 21, 1888, says: "I was called one day in great haste to see Mary C., ten years of age, who was said to be choking to death, and found her complaining of great pain in her throat, which she was grasping and begging her mother to rub for her. The mother, attributing the trouble to 'a worm in her throat,' was vainly endeavoring to pour down a dose of Jayne's vermifuge. The child was unable to swallow, the fluid regurgitating into a handkerchief held in front of her mouth. I immediately administered a hypodermic injection of morphine sulph, gr. one-sixteenth. Although complaining bitterly of the pain induced by the fluid being forced beneath the skin, her face immediately assumed a happy expression, and she laughingly declared she was cured the instant the needle was withdrawn, and, obviously, before the solution could have been absorbed. In a few minutes she was laughing and playing in her usual health. The history showed that her mother had been subject to various neuroses (supposed to be hysterical), and that two other relatives were idiotic or imbecile. I diagnosed hysterical spasm of the œsophagus. The youthfulness of this subject, and the immediate relief afforded by the prick of a needle, are not entirely devoid of interest."

The Time of Death.

While Dr. Munk's charming little book upon Euthanasia is still fresh in our memory, it is curious to note, says the *Lancet*, July 14, 1888, that M. Brouardel has been recently lecturing upon the precise moment of death, considered from a medico-legal point of view. It is with a feeling of some surprise that we learn that he wholly rejects as signs of death both cessation of respiration and arrest of cardiac pulsations. The most recent observations upon a decapitated body showed that cardiac movements persisted an hour after the head had been severed, and on these grounds, as well as on account of the temporary arrest in fainting, he holds that the cardiac movements afford no certain criterion for gauging the precise moment of death. That the spinal cord has comparatively little influence upon the heart's action was well shown by experiments upon two dogs; the one was completely decapitated, in the other only the soft parts of the neck were divided, and yet the time that elapsed before cessation of cardiac movements was practically the same under both conditions.

Elixir of Theine Hydrobromate.

Mr. J. W. England, of Philadelphia, at the meeting of the College of Pharmacy, May 15, read a paper on theine, in which he states that, of all the possible salts of theine—the term is here used synonymously with caffeine—the hydrobromate would, he says, seem to be the one whose chemical character would most consistently give the best therapeutical action. The sedative alkaloid theine, being in combination with the sedative hydrobromic acid, the action of theine hydrobromate should be doubly happy. He admits that the percentage of the acid is small, but, all things being equal, thinks it should, theoretically, be the best. Reasoning on this basis, Mr. England constructed an elixir of theine hydrobromate, which was tried medicinally, and the results obtained would seem to justify the highest expectations formed in regard to it. The formula used is as follows:

Take of:

Theine	℥iss
Dilute hydrobromic acid	f℥i
Water	f℥i
Elixir of orange	q. s. ad Oi.

Dissolve the theine in the water and hydrobromic acid with the aid of heat, filter, and add the orange elixir. Dose: 1 to 3 teaspoonfuls The product is a clear, transparent, water-white liquid; pleasantly bitter in taste; almost neutral in reaction, miscible with an equal volume of alcohol without precipitation. Each teaspoonful contains one grain of anhydrous theine hydrobromate (C_8 H_{10} N_4 O_2 HBr.).—*American Journal of Pharmacy*, June, 1888.

Abscess of the Liver, due to Actinomycosis.

The *Lancet*, June 30, 1888, states that a patient, a commercial traveler twenty-five years old, who had never been abroad and had enjoyed good health, and who was suffering from actinomycosis, was recently under the care of Dr. Payne, in St. Thomas's Hospital, London. He first complained of severe pain over the front of the right lower ribs, three days before admission, which was on May 4. The pain was worse on coughing or breathing, and on attempting to lie on his left side. The hepatic dulness extended upward to the fifth rib in the nipple line, but the lower border could not be felt below the ribs. There was a little albumin present in the urine, and he suffered from slight cough, with expectoration. The cough and expectoration became less, but the pain continued severe, and was subject to exacerbations. The temperature, seldom below 100°, generally rose to 102.2°–103.6° daily. About May 20, slight bulging of the right lower ribs, in front, was noticed, and there was a little friction audible over the fourth interspace close to the sternum; dulness reached to the fourth rib at the nipple. On the 23d, thick pus was withdrawn with a hypodermic needle at a depth of about one inch and a half, in the sixth space, about in a line with the nipple. On the 26th, Mr. Battle cut down in this space and stitched the diaphragmatic pleura to the costal pleura, opening the abscess four days later. Full antiseptic precautions were taken. About four to five ounces of thick pus were evacuated. In a few days the pain was relieved, and the temperature, on the whole, became lower; but on June 1 the temperature rose to 103°, with rapid breathing, and there were signs of fluid in the right pleura, with delirium and vomiting. On the 6th, the pleura was aspirated, and forty-nine ounces of purulent fluid removed. The patient died on the following day. At the autopsy, made by Dr. Hawkins, there was a small emptied cavity in the liver, with surrounding deposits of actinomycosis; empyema on the right side, having no communication with the wound leading to this cavity; and purulent pericarditis. The other organs were healthy.

The Emperor and the American Physician.

Of the late Emperor Frederick, it is told by the New York *Post* that, while he was in London for the Queen's jubilee, Sir Morell Mackenzie introduced a noted American doctor to him. After a careful examination of his throat, the imperial patient, in his usual cheerful manner, inquired: "I suppose an imperial throat is very much like that of other mortals?" "Well, sir," came the quick reply, "we will try and make it so, at any rate." The then Crown Prince thoroughly appreciated the quick Yankee wit, and, striking his broad chest, said: "But this is all right, is it not?" The Yankee gravely looked the splendid proportions of the illustrious patient up and down, and then deliberately drawled out: "As for the rest, sir, you would make a good American." Fritz's merriment was great, but the German doctors present were aghast at such levity.

Influence of Nicotine upon Pregnancy.

At the recent meeting of the Society of Practical Medicine of Paris, July 12, 1888, M. E. de Pradel said that he recently had had a patient who, since her eleventh year, had been engaged in a tobacco manufactory, and who, within three years, had had one abortion at two months and two premature labors at eight months, the children presenting signs of having been macerated for several weeks. Not finding any signs of syphilis in the husband or wife, he asked himself if the cause could be a certain degree of poisoning with nicotine. In spite of divergent opinions of writers, he felt called upon to advise the patient to quit her work in tobacco for good. He says he is induced to believe in nicotine as a cause of abortion from the case related by M. Quinquaud, in which a patient who had had three abortions during her stay in a tobacco manufactory, after giving up her work there had three healthy children.—*Bulletin Médical*, July 15, 1888.

Philadelphia Polyclinic.

The Philadelphia Polyclinic has had a larger summer class of physicians in attendance this year than in any previous year. The prospects of this institution, the only one for post-graduate instruction in Pennsylvania, were never brighter. A number of bequests, one of $5,000, have recently been received. An increase of ward capacity will soon be urgently needed.

NEWS.

—Dr. A. B. Hirsh has removed from No. 2130 Master Street, to No. 1730 Girard Avenue.

—Dr. Kratschmer has been granted the title of Professor in the University of Vienna.

—Dr. Gaffky, of Berlin, has been appointed Professor of Hygiene in the University of Giessen.

—Ten cases of yellow fever and one death were reported September 7, at Macleny, in Baker Co., Florida.

—A disease said to be dysentery has been epidemic in Presque Isle, Mich. There have been 209 cases and 8 deaths.

—Collections of money are being made in New York and Philadelphia for the yellow fever sufferers in Jacksonville, Fla.

—Dr. Franz Hofmann, Professor of Experimental Hygiene and Director of the Hygienic Institute in Leipsic University, has been made Rector of the University.

—Seventy-seven new cases of yellow fever and eight deaths were reported in Jacksonville, September 7, and forty-four cases and six deaths for the twenty-four hours ending 6 P.M., Saturday, September 8.

—Mr. John A. E. Walk, Superintendent of the Presbyterian Hospital, died suddenly, September 7. He had been superintendent of the hospital since 1871. He is said to have had symptoms of heart-trouble for some time, and seems to have died while engaged in writing a letter to his brother, Dr. James Walk, in which he complained of trouble with his heart.

—The *Med. and Surg. Journal*, September 8, 1888, says: The new wing of the Seaside Hospital of St. John's Guild at Cedar Grove, Staten Island, was recently opened with appropriate ceremonies. It measures 100 by 25 feet, and contains 64 beds, thus increasing the capacity of the Hospital one-half, so that it now accommodates 205 mothers and children.

—During the past few years, according to the *Progrès Médical*, the ranks of the medical profession in Paris have increased terribly. People in 1866, says another French contemporary, the *Paris*, were fortunate, for then only 6,506 physicians, surgeons, and druggists undertook to send them to another and a better world; now 10,360 doctors and chemists look after the Parisians, or sell them physic.

—The Philadelphia *Ledger*, September 8, 1888, says: A man who styles himself a doctor, and represents himself as connected with a mythical eye and ear infirmary in New York, has been selling large numbers of what he calls "electrical spectacles," to persons in cities and towns of New Jersey. He gets a deposit of $2 on each pair (which he values modestly at $75 each), to guarantee their return after they have effected a cure, which, he says, will follow a ten minutes' use of them every day for a short time. He doesn't guarantee his own return, however, and in time the victim can see, without the aid of glasses, that he or she is out $2, less a 25-cent pair of spectacles.

HUMOR.

THE ONLY REMEDY.—Doctor, to a *malade imaginaire:* "There is but one remedy that can save you." Patient: "And what is that?" Doctor: "Get your daughter married. You are then a mother-in-law, and they are notoriously very tenacious of life."—*Fliegende Blätter.*

THE UBIQUITOUS nickel and slot automatic delivery machine now appears in New York drug-stores, with several slots, each labeled with the name of some common complaint. The nickel having supplied the motive power, a small glass bottle is shot out containing the "appropriate medicine" for the ailment specified.

TAKING THE CHANCES.—"I w-want two g-grains of q-quinine an' four o-ounces of w-whiskey," shivered a man with malaria to the drug-clerk, "an' I'll take it n-now." "Isn't it rather a small dose?" suggested the clerk. "You seem to have got it bad." "I d-don't know but w-what it is. M-make it e-eight ounces of w-whiskey, an' I'll run the risk."—*American Druggist.*

A BOSTON SWELL recently took a trip way down on Cape Cod. He had occasion to drive from the station to his destination with a typical "Cape Codder," one of those keen but not over-brilliant-looking sons of the sea-coast. The Bostonian had noticed, as they rode along, the bleak country, with its uninviting fields and sandy strips of land, and finally said to his companion: "I don't see how you live in this forlorn-looking country. What do you raise down here, anyway?" "Wall," was the drawling answer, "we plant schoolhouses and raise men."—*Boston Times.*

AN ARIZONA MAN who subscribed for a religious paper some time ago sent a letter to the editor to stop it, in which he said: "We find *The Gila Howler*, our local paper, much livelier than your old milk-and-water affair. Besides, you haven't played a square game in your 'ads.' My wife bought a pair of the corsets you advertised, and blamed if they didn't burst in three weeks, and we use them now to mend the chicken-coop. I took half a dozen of the 'dead shot' pills you puffed up in a reading-notice, week before last, and the next day I was so sick that all the doctors in the town published bulletins about my approaching death, and the boys said I had the jim-jams. For these reasons I have determined to quit your paper and read *The Howler* only. As I know it always lies, unless it is paid to tell the truth, it can't lead me into temptation."—*American Druggist.*

OBITUARY.

JOHN LUTHER STEFFEY, M.D.

Dr. John Luther Steffey, one of the most prominent physicians and surgeons of Hagerstown, Md., died recently, in his fortieth year, as the result of an acute attack of dysentery, which had lasted about ten days. Dr. Steffey was born and brought up in Williamsport, Md. After graduation at the Jefferson Medical College, of Philadelphia, in 1870, with high honors, he practiced his profession for a few years. For the last nine years, he resided and practiced in Hagerstown, Md., where his skill as a physician and surgeon was honored and recognized at home and elsewhere. He has performed some of the most successful and difficult surgical operations in that community. He was warm-hearted and kind, possessed a fine sympathetic nature, and always had a feeling of the deepest tenderness toward his more unfortunate fellow-beings. If he had lived, it was his intention to make gynæcology a specialty, in connection with his general practice.

A few years ago, he married the eldest daughter of Mr. William Schlotlerbeck, who, with an aged father and mother, four sisters, and five brothers, survives him. His death was sudden and unexpected, and it was a great shock to the entire community. The funeral took place at his father's residence, in Williamsport, Md., on Friday, August 24. He expressed a desire to be buried in the cemetery of that place, overlooking the Potomac River, and his desire was respected. May guardian angels guard his sepulchre and may he rest in peace.

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Communications.

THE RELATION OF SOCIAL LIFE TO SURGICAL DISEASE.[1]

BY D. HAYES AGNEW, M.D.,

PROFESSOR OF SURGERY IN THE UNIVERSITY OF PENNSYLVANIA; PRESIDENT OF THE AMERICAN SURGICAL ASSOCIATION.

Fellows of the American Surgical Association: As the generations fare on, enriched by the results of scientific labor, which pours its tides of opulence into all departments of human thought and industry, there follow, through a reactive or reflex influence, certain notable changes, not only in the life and manners of a people, but also in their physical and mental diseases. The more advanced a civilization, the more complex become the problems which surround it. While the accumulation of wealth and the multiplication of appliances for human comfort have, in the aggregate, contributed to the well-being of the race, yet there is reason to fear that the insatiate and ambitious demands of the masterful leaders in the work of the world, unless conditioned and environed by reasonable safeguards, may acquire their triumphs at the expense of human life. It is a suggestive and a solemn thought, that, in the victorious march of civilization, thousands of victims must perish beneath her chariot-wheels. There really seems to be a perpetual antagonism between man's inventions and discoveries and the well-being of a no inconsiderable fraction of humanity. He reduces the elastic vapor of water to practical use, and is rewarded by seeing countless numbers of human beings blown into shapeless masses by his rebellious servant. His chemistry creates formidable explosives, capable of dislodging the solid strata of the earth, and yet, in wicked hands, they become instruments for consummating such diabolical plots as serve to unsettle the peace of a nation! He rears manufactories for fashioning multitudinous fabrics which minister to the comfort and luxury of the race, and yet, while the hands of the fabricator are busy manipulating the materials of these industries, he is breathing a death-laden air. We send our missionaries to China and the Sandwich Islands to reclaim their peoples from the barbarities of heathenism, and then our commerce to ruin their souls and wreck their bodies. There seems, indeed, to be an eternal conflict between good and evil.

Considerations like these naturally lead to a very inviting field of study, namely, the relation between the material prosperity of a people and the forms of their disease. What I propose, however, in discharging one of the duties belonging to the honorable office to which by your kind suffrages I have been elected, is very briefly to follow one line of this inquiry, that is, The Relation of Social Life to Surgical Disease.

There is no tyranny more exacting or despotic than that exercised by the conventionalities which govern our living. All stages of life, from infancy to old age, are under its domination. It dictates the education, the manners, the walk, the dress, the forms of speech—in fine, the whole being. Beyond all contradiction, the behests of fashion are vastly more influential in governing public conduct than any arguments drawn from the teachings of structure

[1] President's Address before the American Surgical Association, September 18, 1888.

and function. As a rule, when the conflict is between taste and reason, the victory will be on the side of taste. In nothing is this more forcibly displayed than in the apparel used to protect the body. It is not an agreeable task to peer into the wardrobes or dressing-rooms of our fair countrywomen. I have no special taste for exploring museums of bizarre collections. Indeed, without a key to interpret the curious and ingenious mechanisms for clothing the form divine, such an exploration would be like an archæologist attempting Egyptology ignorant of cuneiform inscriptions. I have, however, some knowledge of human anatomy, in its broadest sense, and, when I look upon the masterpieces of the human form, whether in marble or on canvas—a Belvedere Apollo or a Venus de Medici—and contrast these with the dressed-out specimens of modern women, I am forced to admiration: not so much at the amazing ingenuity displayed in concealing the divinely-appointed form as at the plasticity and patient submission of mortal clay under the despotism of a conventional Inquisition. Were these processes of mutilation and abnormality harmless—did the body consist of a mere mass of protoplasm, capable, under the application of certain stimuli, of assuming normally Protean shapes, the subject might be passed over with the feelings of a naturalist; but this is not so. These violations of the laws of structure bring with them serious penal inflictions, which, did they terminate with the original offender, might be dismissed with a sentiment of pity; but, projecting as they do their baneful consequences to successors, they become proper subjects for criticism.

Let me name a few examples as illustrative of my subject. For some time, the profession has been speculating on the causation of nasal and post-nasal catarrh, with its accompanying auditory defects, the growing frequency of which cannot have escaped general observation. Doubtless no single agency will explain the presence among us of this unpleasant disease, yet there are facts connected with this affection which, to me, are very suggestive. I cannot recall an instance in which I have met with the disease among females belonging to the Society of Friends, Dunkards, or Mennonites. If this, on more extended observation, proves to be true, may not the head-dress peculiar to these people be accepted in explanation of their exemption? The bonnet, which at one time overshadowed the entire head, as all know, has been gradually shrinking in its dimensions, until it has become a mere shadow of its former self and offers no protection whatever to the head. As a substitute, I would not insist upon the quaint headgear of the Friend, though I believe that any modification which will protect this part of the body will lessen the tendency to catarrhal inflammation of the naso-pharyngeal mucous membrane.

Muscular Restraint.—A legion of physical imperfections arises from muscular restraint. Among these may be mentioned weak ankles, narrow or contracted chests, round shoulders, projecting scapulæ, and lateral curvatures of the spine. The foolish concession to appearance, and the unwise partiality of parents for enforced systems of education, the demands of which bear no just proportion to the capacity of the infantile mind, constitute the initial or determining force of these physical imperfections. In many cases, the weak ankles of children, characterized by eversion of the feet, thus allowing the superincumbent weight of the body to be transmitted to the latter inside of the proper centre of support, is largely chargeable to the miserable practice of placing on the little ones, long before they are able to walk, boots tightly laced up the limb some distance above the ankles. The confinement of the flexor and extensor muscles by this constriction prevents that free play of movement which reacts so favorably on all the elements of an articulation, and that, too, at a time when the growing forces are at full tide; so that, when the time arrives for standing and walking, the muscles are unequal to the firm support of the joint. The consequence of this feebleness is soon seen in the turning outward of the feet, throwing the strain on the internal lateral ligaments, which in turn become elongated through growth, and thus the defect becomes established. But the evil does not terminate here. The calcaneo-cuboid and the astragalo-scaphoid ligaments, losing the proper support of the tendon of the posterior tibial muscle under the abnormal tension, begin to yield, and to the deformity of eversion is added that of "flat-foot." That the above is not a mere hypothetical explanation of the ankle defects, I have many times verified by finding the threatening symptoms disappear after liberating the imprisoned muscles and subjecting the enfeebled parts to a judicious massage. Under no circumstances, as is too often the case, should instrumental apparatus be applied, unless in cases where, from neglect, the deformity is thoroughly established and is progressive.

Take another deformity—that of bow leg. On the earliest signs of the unsightly curve, the limb is too often trammeled with irons and the growth of the muscles arrested, when it is well known that, if manual force is systematically applied two or three times a day, the limbs will gradually assume their typical form.

Again, in further illustration of our general text, take, as an example, a child who, for one long or two short sessions, for six days of the week, sits over the study-desk, compelled to assume a position in which, from the inclination of the body, the shoulders fall forward, the head being supported, most probably, on the elbows and hands. In such a posture, the great serrati and pectoralis major and minor muscles are in a state of relaxation, while the erector spinæ and trapezii muscles are in a state of tension. This change in the position of the shoulders gives the scapulæ over, without antagonism or resistance, to the action of the rhomboidei and the levatores angulæ scapulæ muscles, which, acting conjointly, cause that projection of the lower angles of the shoulder-blades which the older anatomists termed "scapulæ alatæ." To all this must be added the very important factor of four to six hours in the schoolroom, and two hours, at least, of home preparation for the following day's recitations, during which time the respiratory function, having been reduced to a minimum of activity, the muscles of the chest are comparatively passive and æration of the blood tardy. Certainly no combination of conditions could be better devised for forming contracted chests and round shoulders. It is not long before the watchful eye of the mother detects the change in the lean figure of her child. She will probably discover this and take alarm, even when the pale face, the languid air, and the capricious appetite of the child cause no anxiety; and then comes the second act in the drama of physical deterioration, namely, a resort to shoulder braces and stays, in order to accomplish that which the muscles should be taught to do without restraint or incumbrance.

Lateral Curvatures.—While it is true that lateral curvatures of the spine depend upon causes both central and peripheral, yet in no small number the deformity is clearly attributable to influences of a social nature. The young column, by reason of the non-union of the epiphyses and diaphyses and the supple character of its ligaments, is extremely flexible. Whatever, therefore, destroys the muscular equipose, however inconsiderable the force, if persistently repeated, changes the centre of gravity and develops primary and compensating curves. For six months in the year, any fine morning, groups of young children may be seen plodding along our streets with a miniature library of books suspended from one shoulder. To the already preponderating scale of the balance add the additional factor, a probably badly arranged light, compelling these little *savants* to assume a lateral inclination of the body in order to obtain the necessary illumination of the subjects of the study, and you have all of the conditions necessary for perpetuating the lateral deformity. "Just as the twig is bent, the tree's inclined." As in the case of round shoulders, so here, in order to prop up the falling column, instrumental contrivances are immediately called into requisition. The body is encased in a formidable coat of mail, to be followed by muscular atrophy and permanent distortion of one of the otherwise most beautiful pieces of mechanism in the human frame. It is true that, in most educational institutions for the young, provisions are made for physical culture, and these are in some measure antidotal to the evils complained of; but in my judgment they do not at all compensate for that free unstudied romp in the open air, untrammeled by the hard and fast rules of calisthenics, so fascinating to the young child. Nor does the evil end here. While the forcing process, which is to stimulate the mental powers far beyond the real capacity of the immature and growing brain to receive, is in progress, another is inaugurated, which is to qualify, especially the female child, to acquit herself with distinction when the time arrives for entering the great world of society, or, as Thomas Browne would style it, "for the frivolous work of polished idleness." The gait and carriage must be reduced to prescribed rules, the voice toned down to a drawl or trained to move like a mountain torrent. The muscular apparatus of the face must be taught to express, not the spontaneous and natural outflow of feeling which wells up unbidden from the magic chamber of the heart, but rather to produce an effect; and so this work of transformation goes on until it culminates in the full-blown society girl. Is it any wonder that under such a scheme of education, conducted throughout by a studied disregard of both the physical and mental constitution, and exercising as it does such tremendous drafts on the nervous system, the world

is becoming filled with a class of flat-breasted, spindle-limbed young women, unfitted for the varied and responsible functions of womanhood — qualifications, too, which, under a different regimen and directed into proper channels, would exert a most potential influence on all the great social and moral problems of the age?

While thus plain-spoken on the frivolous methods of living, I do not wish to be understood as being unfriendly to the highest cultivation of the mental and physical powers, if conducted on lines in harmony with the organization, nor to any technique which may conduce to personal grace or elegance of manners, so that the manly or womanly personality of the individual be not sacrificed to the Moloch of sentiment and sham. Indeed, indifference to these things is inexcusable in either man or woman as not only lessening their influence in the world, but in many respects disqualifying them for the highest discharge of the duties of modern life. Valuable as may be the unpolished diamond, yet it is only after the wheel of the lapidary has worn away the dull incrustations that its true brilliancy is revealed and the gem is fitted to adorn the brow or the breast of beauty.

Bodily Constriction.—In the further discussion of my subject, I may next notice the evils of visceral displacement and pressure, consequent on abdominal constriction. Whatever may be said in regard to Greek and Roman life, the infinite care which these people displayed in developing and maintaining the very best type of the human form is worthy of admiration. The Ionic "cheton" spoken of by Attic writers and so often represented in the bronzes of Herculaneum, while it would not exactly satisfy the modern idea of dress, was at least free from the charge of interfering with the contour of the human figure. The painters and sculptors of those classic days were reverent students of nature. Their delineations were true to life. Their works furnish us with no hour-glass contractions of the human body. The constriction of the waist operates injuriously on both the supra- and infra-diaphragmatic organs. Any force acting on the base of the thorax and preventing the expansion of its walls concentrates the function of respiration, which should be general, on the apices of the lungs, and hence, under these circumstances, the movements of breathing are for the most part confined to the summit of the chest. As the initial seat of tuberculosis is located at the upper part of the lungs, may not the inordinate work entailed on these parts by constriction have some part in hastening such deposits in the female where the predisposition exists? It is this forcing inward of the costal border of the thorax which causes the groove on the anterior surface of the liver, so familiar to anatomists. This pressure cannot fail to interfere with the descent of the diaphragm and with the functions of the gall-bladder and duodenum, and exercises no small degree of influence in favoring the formation of biliary calculi, females being peculiarly prone to such concretions. The extent to which the liver may be damaged by extreme constriction of the waist is well illustrated by a case quite recently reported in the *British Medical Journal*, in which a considerable portion of the left lobe of the liver had been separated from the right, the two being connected only by a band of connective tissue, thus enabling the operator to remove the detached mass without difficulty. The evil effect of this constriction on the viscera of the abdomen and pelvis is most strikingly witnessed in the embarrassed portal circulation, in the different uterine displacements, elongation of ligaments, displaced ovaries, tubal inflammations, hemorrhoids, hernia, and other morbid conditions which either prevent or disqualify the woman for the exercises of the functions of maternity; and which in addition, through reflex influences, entail a host of functional disorders reaching into every avenue of the body and invading both the mental and moral constitution of the victim. So prolific have these infirmities become that a new department of surgery has been organized for their special management. To what, if not to social causes, can these morbid changes of structure in the pelvic organs, especially of the uterus and its appendages, be attributed? Why should laceration of the cervix uteri be so common an accident? Labor is a natural process, and should not under ordinary circumstances be attended by lesion of uterine tissue. I can conceive of no agency more likely to induce that muscular degeneration which predisposes to this accident than the modes and methods of modern living, especially among the inhabitants of great cities. In the expression "modern living," much is embraced. It includes culinary pharmacy, over feeding and drinking, insufficient or injudicious exercise, improperly heated apartments, and a disproportion between the hours of exercise and rest. Contrast, if you will, the muscles of the hardy country housewife, who,

bearing the cares and responsibilities of a dependent family, bustles about the live-long day indoors and out-of-doors, eats with a relish her plain and simple fare, repairs at seasonable hours to bed, and sleeps the sleep of the beloved, undisturbed by dyspeptic nightmares, and, rising with the golden dawn, resumes the round of domestic toil with a clear head and supple limbs—I say, contrast this type of a class with that of another, the woman born to luxury and ease, whose capricious and exacting taste taxes the art of the professional caterer, who drags out the morning hours toying with some crazy piece of embroidery or trashy novel, lunches at one, rides out in the afternoon for an airing of two or three hours, returns to a dinner of five or six courses at seven, completes the evening at the opera, the theatre, or the assembly, and, coming home after midnight, crawls into bed weary and exhausted in body and mind, only to rise, with the best hours of the morning gone, for another day of aimless routine life. Can it be doubted that, in the first case, with a digestion unimpaired, with the products of textural change consumed by functional activity and eliminated through the proper emunctories, the woman should possess a vital resistance and a tone of tissue altogether superior to that of the other, whose habits of living must necessarily favor their faulty metamorphosis?

To these same agencies must be attributed that brood of nervous and hysterical evils, for the relief of which the gynæcologist, too often I fear, invades the domain of womanhood, around which her whole sexual nature revolves, and which, save only in the direst extremity, should be sacred against all operative intrusion.

Late marriages constitute another social evil, the penal inflictions of which involve both sexes alike. Pride and luxury determine long engagements or defer proposals. Marriage, it is believed, necessarily involves an establishment, a display, a retinue of servitors. The good old notion of two souls being united in wedlock for the purpose of being mutual helpmates, and patiently together working up from modest beginnings to affluence, seems to be entirely at variance with the modern idea of this relation. In the meantime, the young man is betrayed into unlawful sources of gratification, alike destructive to moral and physical purity, the pollution of which by incontinence is often subsequently communicated and perpetuated to wife and offspring. I would not dare to say how many cases of this nature have been entrusted to my professional confidence, though I doubt not my experience does not differ from that of many of my professional brethren whom I address. It is under such circumstances that many of those infective inflammations of the Fallopian tubes, such as salpingitis and pyo-salpinx, arise, which entail the most serious deterioration of health.

The Foot and the Shoe.—It may be thought by some persons that the subject of the foot and the shoe is not of sufficient dignity to appear in a public address. The Romans and the Greeks thought differently. The literature of both peoples is full of references to the shoe worn by both sexes. So important indeed are the feet to the well-being of the body, that whatever impairs their usefulness, either for support or locomotion, becomes a positive calamity. Nothing can be more unlike the human foot than the modern shoe. Let anyone leave the impress of his or her foot in the wet sand of the seashore, and then place alongside of the imprint a fashionable shoe; that the two were ever intended for each other would scarcely strike a child of the forests. The North American Indian entertains juster notions about clothing this portion of his body than does the civilized denizen of New York or Philadelphia. Compare the moccasin with the shoe of the city belle. Compare the *σανδάλιον* or the *περσικαί* of Pollux and of Aristophanes with the same, and we shall see that the savage and the polished Greek alike understood the value of sound feet in the race of life. It is the imperfect adaptation of the shoe to the foot, which constitutes the fruitful source of tired ankles, corns, bunions, over-lapping of the toes, and ingrowing nail. Some idea may be formed of the magnitude of the evil from the fact that, of eight hundred patients under the care of a prominent chiropodist of Philadelphia, the great majority of the defects were entirely attributable to the high heels and the contracted toes of the shoes. Especially do these physical incumbrances arising from a blind submission to social laws operate disadvantageously to our fair women at the beginning of the new dispensation requiring both muscles and brains, and when her friends propose to sweep away all the old traditions and claim for her the earth with all its masculine employments.

Games and amusements, which in themselves are proper and praiseworthy, too often become developed into a craze, working both moral and physical mischief.

Professor Leuf, himself a professional in the national game of base-ball, has described the pitcher's arm, a condition of over-taxed function, and one in which all the anatomical elements of the upper arm are involved. There are also the tennis arm and the swollen supersensitive prostate of the bicyclist, both due to the abuse of popular amusements.

Defects of refraction or visual defects constitute another class of affections fairly attributable in many instances to social influences. The number of children who may be seen in our streets any day, wearing glasses, has become a matter of common observation. It is far from being probable that the most exquisite piece of mechanism, the human eye, came from the Divine Artificer imperfect. Because eyes are young, it does not follow that they are thereby better fitted to sustain prolonged use. Just the reverse is true, and it is high time that parents and educators should begin to recognize the fact. The power of the eyes for continued use, like that of other organs of the body, is one of gradation. It moves in the general procession and strengthens with the advance in life until development has attained to its zenith. Not only so, but the eye, being a part of the body, must suffer or rejoice through the operation of general causes. A bone may have its normal curves changed, a tendon may slip from its appointed groove, or a blood-vessel be destroyed, and yet very little disability be realized; but the eye is made up of such extremely delicate structures and acts according to fixed physical laws, so that not the slightest alteration of a curve or the mobility or density of its media can occur without great vitiation of function. To exact, therefore, long hours of study from children of a tender age involves a degree of functional strain altogether disproportionate to the structural resources of the organ, and, by disturbing the orderly processes of nutrition, gives rise to hypermetropia, asthenopia, astigmatism, and its companion, headache. That the picture is not too highly colored, or the causation overstrained, we have only to contrast the children born and reared in those portions of the country not too much dominated by the methods of modern civilization, and who rarely demand a resort to artificial aids to provide for abnormalities of vision. The only remedy for the evil, where infantile scholarship is insisted upon, is the kindergarten, or object system, the most natural and effective plan of impressing the young mind.

Renal Disease.—Is there any reasonable explanation drawn from sources of a social nature for the great frequency of those renal disorders which come more especially under the care of the surgeon, such as crystalline deposits and calculi? For maintaining the general health at the highest physiological standard, a proper quality of food and the proper disposal of tissue-waste are essential conditions. Along with wealth and luxury come the abuses of the table. Americans are fast becoming a nation of dyspeptics. Our country is so rich in the products of every zone that nowhere else in the world can be found such a variety of foods, animal and vegetable. These foods, manipulated in a thousand ways by the subtle art of the professional cook, almost necessarily betray one into excess, and also create the desire for wines and other alcoholic beverages to aid the stomach in disposing of its plethoric supply. In great cities, which furnish relatively the largest number of cases of renal disease, affecting pre-eminently the mercantile and sedentary classes, we find just the conditions favorable to their development. The competitions of trade keep the merchant always at white heat. Time is golden, and the street-car and other means of conveyance annihilate distance, and the ride is substituted for the needful walk. A hasty lunch at the most convenient restaurant satisfies the inner man until the business of the day is closed, when, weary and worn, he is driven to his home to partake of a course dinner, the balance of the evening to be spent on the lounge with the evening paper or the latest periodical. The fascinations of the study and the library charm the literary man, with their siren voices, away from the fields and the highways until bodily exercise grows distasteful and repugnant. In the meantime there has been no provision made for the waste or tissue metamorphoses of the body through that great agency, exercise. These waste products accumulate in the blood, the internal eliminating organs, of which the kidneys are chief, are overtaxed, and then follow the evils of malassimilation and of excretion in the form of urates and oxalates, often resulting in the formation of calculi.

In conclusion, may we ever hope for a time when the race will realize that these bodies which we wear, which God has so highly honored by his own incarnation, are sacred temples to be kept in harmony with recognized physical laws, and not to be made instruments of mere animal gratification!

THE HYPODERMIC USE OF MURIATE OF COCAINE IN ORAL SURGERY.

BY ARTHUR C. HUGENSCHMIDT, M.D.
(UNIV. PA.), PARIS, FRANCE.

In this communication, cocaine shall be considered as used hypodermically only, as my intention is not to make a revision of the different ways in which muriate of cocaine is or has been used.

Cocaine hypodermically has been used for some time by many practitioners; I must state, however, that my attention was called to the fact of using this method in oral surgery while listening to the excellent lectures delivered by Prof. Horatio C. Wood at the University of Pennsylvania in the early part of 1885, when he recommended the hypodermic use of this drug to produce local anæsthesia in cases of minor surgery, opening abscesses, felons, etc. Some months later, having a portion of necrosed bone to remove from the outer alveolar portion of the superior maxillary bone, cocaine was injected and the operation performed painlessly.

I have, up to date, administered this drug in this way in over 400 cases, and have had five cases in which severe symptoms have presented themselves, which were due to the physiological action of the drug. In from 15 to 20 cases, I have noticed one or more of the symptoms presented by the first series; all the others felt perfectly well; I have had only one local accident.

I prepare my hypodermic solution myself, as it is quite important that it should be perfectly fresh. To do this, I prepare little packages containing each one grain of muriate of cocaine; when I want to make my solution, with the hypodermic syringe twenty minims of distilled water are measured in a teaspoon, the cocaine salt (1 grain) is then added; ten minims of this solution, or ½ grain, is the quantity required. This dose will, in certain persons, produce quite severe symptoms; hence I do not think it advisable to recommend one grain.

For any operation on the mouth, removal of small tumors, of necrosed bone, of roots or teeth, make a double injection of five minims each of the above solution on each side of the operation-field; for the removal of a root, for instance, make an injection on the outside of the alveolar portion, and one on the inside, in the palatal region, opposite the root to be removed. In five minutes, even less, you can excise your tumor, remove the diseased bone, or extract a root, painlessly.

I must also recommend especially that, whenever we are in the neighborhood of a bone, we must be careful that the injection is not made while the needle is in contact with the bone, or else a detachment of the periosteum will be produced, which would bring on a local slough and necrosis; this has occurred to me in one case only, but it is enough to enable me to guard others against such an annoyance.

Another precaution not to be forgotten is to wash the operation-field, before inserting the needle, with an antiseptic solution, bichloride (1–1000) being one of the surest; this precaution is especially necessary when we operate in the mouth.

Let us first consider the local action of the drug. The anæsthetic action (local, of course) is an almost immediate one in certain cases; in others, it will take from two to five or seven minutes. At the time of injecting, the parts which surround the point of injection become temporarily bleached—due, of course, to the force necessary to introduce the liquid in such dense tissue as the gums. The local action of the drug is a twofold one: its immediate effect is an anæmia of the injected part, due probably to a stimulant action on the vaso-constrictor of the peripheral vessels; the local anæsthetic effect is due to an inhibitory action on the peripheral sensitive nerves. These are the results obtained by Laffont and Arloing; in fact, Laffont calls cocaine "sensitive curare," its action, according to him, being to act on the termination of the sensitive nerves as curare does on the peripheral motor nerves. Brown-Séquard has drawn attention to the fact that sensibility to pain alone disappears while the tactile sensation remains, with all agents which act on the peripheral nervous system. This is the case with cocaine, for I have always noticed, whenever I have given the drug in injections, that after the operation the patient will report that he has felt nearly every step of the operation, without any pain whatever. Cocaine is then a local anæsthetic to pain only, and not to tactile impressions; it is then a true local anæsthetic. Brown-Séquard has also demonstrated lately that, when cocaine is injected directly into a vein, a general anæsthesia, similar to that of chloroform or ether, will be produced—an insensibility to both painful and tactile impressions.

Passing now to the consideration of the

action of cocaine on the general system, we find that, when ½ grain of muriate of cocaine is injected, in the very great majority of cases no unpleasant symptoms will present themselves, provided that the patient is in a normal state, not fearing the approaching operation. If, however, a person presents himself, frightened at the coming operation, we must be extremely careful, and I should even advise never to inject cocaine in a person who shows the least fear. Try to convince him of the simplicity and painlessness of the operation; if you do not succeed, postpone your operation to another day. If you do inject when the patient is in that state of fear, you will certainly produce a *partial unconsciousness*, which is a peculiarity of the action of cocaine, for I have never seen complete unconsciousness in all my practice with the drug.

The symptoms produced in frightened persons or those especially susceptible to the action of cocaine, given in doses of ½ to 1 grain, are the following: From thirty seconds to two minutes after the injection, the patient complains of a strange feeling in his head, a sense of emptiness; he then becomes pale, and, with the increase of the pallor, he complains of cold all over; in one case, formication in the extremities was experienced. Respiration soon becomes slowed, irregular, embarrassed—a gasping respiration. The pulse runs up to 110 or 130. The patient never loses consciousness. He is in a state of partial insensibility; he remains perfectly quiet, eyes closed, this state of quietude being every now and then broken by a gasping inspiration. This state very much resembles the later stages of opium-poisoning; the patient will open his eyes, if you tell him to do so; he will answer your questions, but will immediately sink into his former condition. If you ask him if he feels bad, he will invariably reply that it is a most delightful state to be in, and two of my patients told me they regretted that this state did not last longer. On the contrary, when the drug begins to act and the patient feels faint, two or three of my patients have told me they felt as if they were dying. This only partial insensibility seems to be corroborated by Dr. Djerine's case, in which the patient himself had taken 15 grains of cocaine muriate; he remained apparently unconscious for half an hour, but afterward assured the physician that he felt him when he pinched his hands. Consciousness is, therefore, not entirely lost to the patient, although it seems to be to those who surround him. The pallor of the face and the sensation of extreme coldness in the extremities indicate certainly a general vaso-motor disturbance. Cocaine seems also to influence very much the circulation, as well as the respiration, which it probably effects by a great disturbance of the cerebral circulation at the base of the brain, resulting in cerebral anæmia. Laffont has indicated that it had a very exciting action on the vaso-constrictor filaments of the great sympathetic nervous system.

How can we explain the apparently increased physiological action of the drug on frightened persons? We must first consider the state of the cerebral circulation in such persons. Surgeons and physiologists who have the opportunity of seeing the brain exposed, either after an accident or artificially so in animals, tell us that if such a man, whose brain is exposed, becomes frightened or is wrongly accused of having done a certain act, his face becomes pale, and at the same time there is a depression of the surface of the brain, which, in addition, loses its normal slightly pink color and becomes anæmic. Now, the same occurs in any patient about to be operated on, who is at all frightened. If to such a patient, whose brain is already in a state of anæmia, you administer cocaine, which also renders the brain anæmic, a series of symptoms indicative of brain-anæmia will certainly follow. Such symptoms are: A tendency to unconsciousness, pallor of face, coldness of the surface of the body, etc.

On the other hand, the condition of a person who has been tickled for some time, or who has laughed a great deal, is exactly the reverse from the frightened persons; the cerebral circulation, instead of becoming anæmic as in fear, is, on the contrary, increased; there is a temporary congestion. If to such a person cocaine is administered, this drug will counteract the action of the tickling on the cerebral circulation, and no symptoms whatever should be noticed. The following case illustrates this statement. To a young person, 25 years old, I had to administer cocaine for a certain operation; ½ grain produced the above-described alarming symptoms. About one month later, having another operation to perform, I talked to the patient a long time, and tried to induce him to laugh; when this patient's face was congested, I suddenly introduced the needle and injected ½ grain as before; no symptoms whatever showed themselves. I have also given cocaine to plethoric subjects with very much congested faces, even up to ¾ of a grain and 1 grain, without producing

the slightest symptom, although in two cases the patients were quite frightened.

The influence of fright and the previous knowledge of the symptoms produced by cocaine are well exemplified by the following case. A woman about 60 years old, desiring to have a tooth extracted, I was called to administer the cocaine. I found the patient in a highly nervous state; she said that she knew cocaine produced bad symptoms—a terrible sensation in the head and fainting. I at first refused to administer the drug; but, as she insisted, I finally consented, but gave her instead ten *minims of distilled water;* in less than half a minute she complained of a terrible sensation in her head, and soon *fainted completely*, but not in the semi-unconscious state characteristic of the effect of cocaine, as her physician had forgotten to specify to her this particularity. This was, of course, an instance of auto-suggestion or self-hypnotization.

Care must be exercised in administering cocaine to anæmic patients. Two of my general accidents occurred in anæmic patients. One of them is interesting on account of the influence of an iron treatment on a subsequent operation. Having given as usual ½ grain of cocaine muriate, the patient had the symptoms described above; after having placed her on an iron treatment for six weeks, when she returned I renewed my cocaine injections; no symptoms at all presented themselves; she felt perfectly well. Hysterical patients are also to be carefully managed, as I produced in my earlier use of the drug a fit of hysteria—by the use, it is true, of a large dose (about one grain of cocaine).

As cocaine seems to have such a decided action in rapidly lessening the cerebral circulation, should it not be advisable to try its use hypodermically in cases of cerebral hemorrhage or apoplexy, or even in sunstrokes? About a month ago, a woman came to me, and while in my office she was suddenly seized by palpitation of the heart, suffocation, and her face became congested; it was a very warm and close day. I then thought of using cocaine, and injected 7 minims of my solution (about ⅓ grain of cocaine); in less than two minutes she told me she felt perfectly well again, and had begun to feel better a few seconds after the injection was made.

As to the treatment of the bad symptoms produced by cocaine. If there is only a slight fainting, the use of the ordinary smelling-salts will be all that is required. If, however, the patient remains pale, pulse rapid, respiration embarrassed, drowsy, give him occasionally, to inhale, about five drops of nitrite of amyl, placed on a handkerchief, and ward off sleep by talking to him continuously and moving his arms up and down.

In one of my anæmic patients, in addition to the above, I gave, with excellent results, a hot brandy punch, in which were forty drops of ether. Finally, in cases of very severe symptoms, when a person has taken several grains of cocaine, the repeated hypodermic injection of ether will certainly prove to be of the greatest use.

AN ALMOST UNRECOGNIZED CAUSE OF DISEASE IN YOUNG CHILDREN.

BY HIRAM CORSON, M.D.,
CONSHOHOCKEN, PA.

During my many years of practice, there have been many occasions on which I found it necessary to warn persons who used tobacco against using it in the sick-room, especially in the lying-in room. I have often known poor men, after coming from work and also in the early morning, to fill the room where there was an infant only a few days old, with tobacco-smoke, and that some of these children sickened and died from the effects of it I have no doubt. Three years ago, I was passing along Green Lane, a street running from Roxborough to Manayunk, when I met a young man proudly carrying a child of but a few months, on his shoulder, with the child's face close to his own head. He was smoking, and, as he faced the wind, the smoke was carried back into the child's face. It was Sunday, and himself and wife had apparently just started to visit friends in Manayunk—a very short distance. After I had gotten away from them, I reproached myself for not having accosted them and warned them of the child's danger. It is quite probable that, before they reached their friends, the child was sick; then, if a doctor was sent for, he was doubtless told: "It was quite well when we left home, and we can't tell whatever has made it so sick." Being so very sick, and malaria being so plentiful in that region, the doctor could readily see that it ought to have medicine—some antiseptic or some germicide—and then—well, we may fancy the rest.

I have often, when called to young children, believed that the cause of the sickness

was due to the fumes of tobacco; removing them from the cause often soon placed them in safety. And yet that many suffered from that cause, and that it was not recognized as such by me, I have no doubt.

Can it be possible that an infant could be subjected to so potent a cause of disease without being deeply affected by it? But it would be difficult for the most vigilant physician, however anxious to prove this a frequent cause of sickness, to do so. Children, no doubt, often become accustomed gradually to the fumes of tobacco, and after a while they have little effect on them. But that it has a deleterious effect on children of even one or more years of age is probably true.

In *Friends' Intelligencer and Journal* of the present month, there is reported a case so carefully observed and so evidently caused by tobacco, that I feel it to be important to give it to your readers. It is entitled:

"Important to Fathers who Smoke."

"May I give you my recent experience of tobacco-smoke? It may be a warning to others. I have one child, a little girl not yet two years old, who was as healthy as the birds when she was born. For more than a year past, ever since she was old enough to be less in the nursery and more with her father and me, she has ailed mysteriously. I could not say she was ill, yet she was hardly ever well. I was in a perpetual state of anxiety about her. The symptoms were absence of appetite, complaints of sickness, stomach and digestion out of order. Last August, I took her to a country town, where we stayed two months. After the first week, she flourished like a young bay-tree, ate, and drank, and laughed, and played, and slept, and kept me forever busy enlarging her garments. I brought her home rosy and robust. In one week, all the old symptoms reappeared—loss of appetite, dark lines under the eyes, listless ways, restless nights. Some one suggested that the neighborhood did not suit her; and I was cogitating how to take her away again, when she caught a severe cold and was confined entirely to one room for three weeks. She recovered her health completely. Appetite, spirits, sleep, all returned. It could not be the neighborhood. After her cold, she joined us downstairs again, as usual, two or three times a day. In less than a week, sickness, etc., returned. I was in despair. For nearly three months, I racked my brains about drains, wall-papers, milk, water, sauce-pans, any and every thing in vain—the child slowly wasted. The weather was too severe to take her away. In an agony of mind, I noticed one day that, so far from out-growing her clothes, as I expected, they were too large for her. The little thing was not eating enough to keep up her strength, and we could not coax her to eat. Yet she was not really ill; she ran about and played in a quiet way, and looked fairly well to those who had not seen her more robust. Suddenly my husband was summoned into the country. A week after he went, she began to eat with a relish. In a fortnight, she was her own happy self, full of riotous childish spirits. 'Her father has never seen her like this,' I remarked, one evening, when she was particularly merry and mad; and then the truth flashed upon me. It was his tobacco that upset her. He has been away now for a month; and the child's limbs daily get firmer and rounder, and she is the merriest, healthiest little mortal possible. He always smoked after breakfast and after lunch, with her in the room, neither of us dreaming that it was injurious to her. But for his providential absence this time, it would never have occurred to me, and we might have lost our darling, for she was wasting sadly. It was acting like a slow poison."

It seems to me probable, from the above history, that the child was confined to the nursery for the first few months, and not with the father when he was smoking, and was thus not affected so early as children often are. With rich people, in cities, the "smoking-room" saves children, infants at least, from early poisoning by tobacco-smoke. But that thousands of infants, in the homes of the poor in the small crowded houses of the alleys in cities, are sufferers from this cause is quite probable. People with consumption and other exhausting diseases are sometimes greatly nauseated by the odor of tobacco brought into the sick-room by a physician much given to the use of tobacco. I have several times heard them speak of its being very offensive to them.

As "a word to the wise is sufficient," it seems to me quite proper to call the attention of the profession to this cause of disease, of suffering, and ofttimes of premature death.

—The New York State Medical Association will hold its fifth annual meeting at the Hotel Brunswick, Fifth Avenue and Twenty-seventh Street, New York City, October 9, 10, and 11, 1888.

CASE OF TRAUMATIC TETANUS; DEATH.

BY LLEWELLYN ELIOT, M.D.,
WASHINGTON, D. C.

Charles McG—, white, aged 9 years, on March 16, ran a splinter, one inch long, into the thumb of the right hand; a portion of it was removed at the time. Four days later, the thumb began to swell and to become painful. Poultices of flax-seed meal were applied. On the ninth day after the injury, the remaining portion of the splinter was removed. On March 26, he complained of stiffness of the jaws, general malaise, pain about the chest, and by night of the same day the jaws were locked. On March 27, the following prescription was ordered for him:

℞ Chloral. hydrat. . . . . ʒiij
Potass. bromid. . . . . ʒiij
Aquæ font. . . . . fʒij
M. Sig. A teaspoonful every half-hour.

During the day, he had two spasms. At eight o'clock in the evening, he was sleeping, but was very restless. The medicine was then ordered to be given every hour. On March 28, he had two spasms toward morning; they did not last more than a minute. The following was ordered in conjunction with the chloral mixture:

℞ Tinct. cannabis indicæ . . . . . fʒi
Sig. Fifteen drops every two hours.

At 11.15 A. M., his pulse was 135; he was awake; had had an attack marked by opisthotonos; the jaws were not so closely set as they had been the day before. At 1.45 P. M., he was given gr. ¼ morphia sulphate; this was repeated at 6 P. M. At 11.30 P. M., he had been sleeping much; the bowels were moved by an enema.

March 29, 2 A. M.: Bowels have moved again, pulse 174; suffers much from thirst; there is slight movement of the jaws. At 2.35 P.M., he had a convulsion, the first one since 11.15 yesterday morning. At 4 P. M., he had another convulsion, and at 5 P. M. he had another, during which he died.

Milk was the only nourishment he would take during the time of his illness, and the parents afterward admitted having stopped giving the medicines, because he did not want to take them. The improvement following the use of the remedies above mentioned would, I believe, have been permanent, had the parents persevered in their use, and I am encouraged to employ them again when another occasion presents itself.

ACETATE OF LEAD IN THE TREATMENT OF DIARRHŒA.

BY L. L. AMES, M.D.,
REYNOLDS, NEB.

I desire, in the short article which I herewith submit to the readers of the REPORTER, to give my experience with an old and valuable remedy, which, in the modern whirl of excitement after new remedies, seems to have been almost forgotten by the profession.

On July 27, 1888, I was called to see G. N., six months old, and I found my little patient could keep nothing on its stomach and showing indications of extreme thirst, while its bowels were moving every hour or two, the discharges being green and very watery, and the temperature in the axilla was 103½°.

I ordered the child to be sponged with tepid water to which a little bicarbonate of soda had been added. As the head was extremely hot, cloths wrung out of cold water were kept constantly applied to it, and I prescribed

℞ Tr. opii . . . . . gtt. xvi
Bismuth subnit. . . . . ʒ ii
Mist. cretæ . . . . . fʒ iss
Syr. simp. . . . . fʒ ss
M. Sig. A half-teaspoonful once in three hours.
(J. Lewis Smith's prescription.)

On the next day, I returned and found my patient in no way improved, excepting that it slept more and was more quiet. I continued the prescription. July 29, I found the child's temperature 102½°, its tongue dry and brown, accompanied by extreme thirst and frequent watery discharges from bowels. It could retain only a very small quantity of nourishment. I ordered barley-water to be given in place of water, for the thirst, and, as the child did not nurse, it was given small quantities of cow's milk once in two hours and a half, to which was added lime-water. Small powders of ingluvin were given after taking milk, and the prescription of July 27 was continued. July 30, there was no improvement; the child's extremities were cold; its axillary temperature was the same as before. I now ordered alcohol to be added to the baths, withdrew the bismuth prescription, and ordered one grain of salol to be given every two hours, and warm applications to be made to the extremities. July 31, there was still no improvement. August 1, I found the child very much emaciated; its eyes were rolled up in its head, the eyelids only

partially closed, and the conjunctivæ congested; the temperature was 102½°; the discharges from the bowels were about the same, and the abdomen was considerably distended with gas, while the other symptoms about same as before. I now ordered cloths wrung out of hot water to be applied to the abdomen, and the following prescription to be used:

℞ Plumbi acetat. . . . . gr. iss
Tr. opii . . . . . gtt. x
Spr. vini Gallici . . . . . f ℥ ii
Aquæ . . . . . q. s. ad f ℥ i
M. Sig. A teaspoonful once in three hours.

I also ordered small powders of pepsin and ingluvin to be given after each time the baby took its nourishment. August 2, I found the temperature 101°, the bowels free from gas, and that only four movements of the bowels had taken place since I last saw it, while all the symptoms showed improvement. The last prescription was now given only once in four hours, and a few drops of brandy were given between the doses, so that the infant got a little stimulant once in two hours. I also gave half a grain of quiniæ sulph. once in four hours. August 3, I found the child's temperature normal; that it had had only two discharges from the bowels in twenty-four hours; that its mouth and tongue were becoming moist, and that it was showing an inclination for food. I therefore discontinued the acetate of lead prescription, but continued the quinine and pepsin. On the next day, finding my patient still improving, I prescribed a tonic of cinchona and iron, to be continued for several days, and the child has now made a perfect recovery.

A second case in which I used the acetate of lead successfully in the treatment of diarrhœa was that of a woman in the third week of typhoid fever. She had lost control of the bowels entirely, the discharges being involuntary. I had used bismuth subnitrate, ten grains, with a grain of powdered opium, given every four or six hours, but it had failed to give relief. One-sixth grain of nitrate of silver was added to the other drugs without effect. Suppositories composed of ten grains of bismuth subnitrate, two grains of powdered opium, and one-fourth grain of nitrate of silver were equally useless. I then ordered

℞ Plumbi acetat. . . . . gr. ii
Tr. opii . . . . . f ℥ ss
Aquæ . . . . . f ℥ iss
M. Sig. A tablespoonful once in four hours.

The discharges immediately became less frequent, the soreness left the bowels, and, after the first dose of the prescription was taken, the gain was steady, until now convalescence is fully established.

In closing, I beg to say that I believe many young practitioners, and some old ones, fool away too much valuable time experimenting with every new medicine that is brought to their notice by advertisements, while they leave untried the old remedies which have stood the test of years.

Hospital Notes.

Philadelphia Hospital.

(Service of Dr. William Osler.)

Reported by F. W. Tally, M.D., Resident Physician.

Blue Spots in Typhoid Fever.

In connection with the note on Blue Spots, by Dr. Osler, Reporter, August 4, p. 156, the following case will be of interest:

Patrick O'B., 19 years old, was admitted to the medical wards of the Philadelphia Hospital, August 17, 1888, under the care of Dr. William Osler, suffering from typhoid fever, in the eighth day of the disease. On examination, several pale-blue spots were noticed on the abdomen, in the right lumbar and the epigastric regions. They measured from three to six lines in diameter, were irregular in outline, not elevated, and not disappearing on pressure. No red spots were seen, although carefully searched for. On the following day, three new spots appeared near the umbilicus. New spots were seen each day over the abdomen, a few being found in the right axilla and in the bend of the left elbow. Usually they began to fade on the fourth day, disappearing about the sixth. They reached their greatest number about the twentieth day of the disease, when three rose-red spots appeared on the abdomen, and by the twenty-fourth day only a group encircling the umbilicus could be found.

The temperature during the disease has been high and obstinate, although delirium has not been present. With reference to the French view, that these spots are produced by pediculi, it may be noted that the patient was most carefully watched, and no trace of lice detected.

—Dr. Stephen Smith writes to the *Medical Record* that several years ago he transplanted seventy-five particles of skin from a leg which had been amputated over two hours; seventy-three of the particles of skin lived and grew vigorously.

PERISCOPE.

Treatment of Epilepsy by Galvanization of the Thyroid Body.

Since the works of Kocher, Juillard, Schiff, and others, says the *Bulletin Médical*, August 22, 1888, we know that, in man and animals which have been subjected to total extirpation of the thyroid body, a cachectic state (*cachexia strumipriva*) develops, which is accompanied with trembling and attacks of tonic and clonic convulsions much resembling true epilepsy. These facts have induced M. Signicelli (*Revista clin. e ter.*) to think that some epileptic patients may present conditions more or less analogous to those of animals which have undergone thyroidectomy; that, in other words, there exist, perhaps, some forms of epilepsy produced by a functional alteration of the thyroid gland. This idea has been confirmed in a certain measure by the study of two patients in the insane asylum of Ferrare, in whom the correlation between the state of the thyroid body and the psycho-nervous functions was evident. The first, a maniac, presented a marked swelling of the thyroid body, which was tender even upon very slight pressure and during the movements incident to deglutition. The pupils were enormously dilated, and reacted but slowly to light. The swelling of the thyroid diminished until it disappeared completely in the course of twelve days. At the same time, the symptoms of psychic excitation diminished and disappeared, and so did the mydriasis. In the second patient, a young epileptic, the thyroid body, uniformly swollen, was the seat of spontaneous pain, recurring in paroxysms. However, M. Signicelli was unable to prove, in this case, any connection between the phenomena on the part of the thyroid gland and the epileptic paroxysms.

Signicelli then tried the effect upon epileptics of the galvanic current applied to the thyroid body, with the view of arousing the supposed defective function of the gland. The indifferent electrode was Erb's, the active one was about four and five-eighths inches square, and each was applied alternately upon each half of the thyroid body. Each sitting lasted from one to five minutes; the force of the current varied from two to ten milliampères. Under the influence of the current, there was observed in three cases a manifest tendency to sleep; and, in all the patients, a hyperæmia of the face, especially notable in two cases. The diameter of the pupils remained unchanged.

This galvanic treatment was tried in seven cases, with the following results: In three patients, no modification, either in the number or in the intensity of the paroxysms, nor yet in the psychic state. In the four others, at first increase and then rapid and progressive diminution of the number of paroxysms, which even ceased altogether for a month in one patient, and for two months in another. In the case in which the number of attacks had diminished, there was remarked in addition a favorable modification in the character of the paroxysms. Thus, the aura and the other prodromic phenomena, very marked before the treatment, disappeared after the sittings of galvanization; the duration and intensity of the attacks diminished; the tonic convulsions were no longer observed. There was thus demonstrated a marked amelioration in the post-epileptic phenomena and in the character of the patients, who, after each paroxysm, recovered their consciousness much more quickly than before. The mental dulness diminished, the taste for work increased, the patients became less violent.

Combined Chloroform and Cocaine Anæsthesia.

Professor Obalinski, of Cracow, says the *Lancet*, August 4, 1888, remarking the antagonism between chloroform and cocaine, determined to take advantage of it in anæsthesia for operative purposes. He has now employed the combined chloroform and cocaine method in twenty-four cases, with, as he states, the most satisfactory results. He first administers chloroform by means of an Esmarch's mask until the stage of tolerance is reached, which is generally in from four to twelve minutes, with the use of from one to three drachms of chloroform. He then injects into the region about to be operated on a solution of cocaine of the strength of from 3 to 5 per cent., the total quantity of cocaine injected being from three to five sevenths of a grain. Even more than this might, he thinks, be safely used, both because chloroform is the best antidote to cocaine and because part of the cocaine is about to be removed from the body by the operation. After the injection, no more chloroform is as a rule given, unless in protracted operations, when very small quantities are administered at considerable intervals. For this method, several advantages are claimed, amongst

others the following: A smaller quantity of chloroform is sufficient; vomiting is very rare; the depression on awaking is much slighter than when chloroform alone is used. The only disagreeable symptoms which Professor Obalinski has observed have been excitement and throwing about of the arms in some nervous people; but, as this occurs when chloroform alone is used, it is not at all certain that it ought to be ascribed to the cocaine. He recommends the combined method for extensive operations, finding the local use of cocaine usually quite sufficient to render minor operations painless.

Climate in Graves' Disease.

B. Stiller, of Budapest, has an interesting essay on this subject in the *Wiener med. Wochenschrift*, No. 27, 1888, in which he reports the very favorable results which he obtained from the high-altitude treatment in two cases of Graves' disease. We learn from the *Deutsche med. Wochenschrift*, August 16, 1888, that the first patient was a woman of weak nervous system, who was disturbed by family catastrophes, and finally developed a well-marked Graves' disease, which was preceded by symptoms of hysteria and neurasthenia. In addition to the specific symptoms of the disease, there was hypertrophy of both sides of the heart, associated with a systolic murmur. In 1874, she was sent to Preblau, in Kärthen, which is 3000 feet above sea-level. Here her pulse fell from 120 to 70 or 72, and remained steady at that number; the exophthalmus also subsided. In the winter, however, on returning home, the patient relapsed. In the winter of 1879, all the symptoms of heart-failure, together with unusual dilatation of all the arteries, occurred; the condition was desperate; digitalis failed utterly. Urged by relatives, she again, in spite of her condition, sought a cure at Schmeck's (3000 feet above sea-level).

She bore the journey, and after two months came home much improved, without dropsy, nor did dropsy recur. In the last few years there have occurred, as complications, acute circumscribed œdema, transient attacks of aphasia, and, in the winter of 1883, while on the Riviera, a peculiar apopletic attack. Winter before last, there occurred a very threatening change in the action of the heart, accompanied with irregularity, weakness, very rapid pulse, etc. Last summer she again went to Schmecks, and returned strengthened so as to be able to withstand several occurrences which were calculated to weaken her.

In another case analogous to the one just described, Stiller caused the patient to seek a high climate in winter, with excellent results. This patient was also a woman, and was forty-three years old. Stiller does not give a physiological explanation of this action of the climate of an elevated region, but raises the question whether or not it may be tried with success in other forms of heart-disease in the stage of disturbance in compensation.

Spinal Manifestations of Gonorrhœa.

In a communication in the *Revue de Médecine*, No. 6, 1888, Drs. G. Hayem and E. Parmentier say that, as the idea of infection is to-day intimately connected with the word gonorrhœa, one is led to charge to the account of this general infection certain complications which appear in the course of gonorrhœal urethritis. Among these, certain nervous disorders of spinal origin have attracted the attention of a small number of observers such as Stanley, Gull, Everard Horne, Tixier, Peter, and Ricord; but they have not up to the present time received a very satisfactory interpretation, and have been confused, at least in part, with some of the manifestations of sciatica. Hayem and Parmentier take up the question again. Relying on previous observations and upon some of their own, they show that, in some cases of gonorrhœa, spinal phenomena are met with, such as girdle pain, lightning pains in the lower limbs, double sciatica, hyperæsthesia, exaggeration of the patellar reflex, epileptoid trembling, impairment of mobility, and atrophy of the muscles of the legs and thighs. True paraplegias have been noted. These phenomena appear usually during articular and synovial complications, accompanying them through the periods of recrudescence and decline, so that the notion of simple coincidence is excluded, and present, likewise, a period of appearance variable in accordance with the onset of the gonorrhœa. These spinal complications may be grouped in three categories: disturbances of sensibility; disturbances of sensibility and of mobility together; and disturbances apart from mobility, paraplegia in different degrees. They affect, moreover, exclusively the lower limbs, and appear especially in the form of a congestion of the cord, of a meningo-myelitis involving more or less the posterior or postero-lateral portion of the cord. One must, however, take

into account the inflammatory irritation which may affect the nerve-roots crossing the spinal membranes, and, perhaps, as Velpeau has noted, of the compression or direct irritation of these roots in the course of vertebral arthritis.

To sum up, among the spinal complications whose cause has been hitherto undetermined, there are some which proceed directly from gonorrhœa. Hereafter, spinal complications should be included among the exceptional localizations of the gonorrhœal infection.—*Gazette Hebdomadaire*, July 27, 1888.

Prognosis in Diseases of the Respiratory Organs in Children.

Dr. Jules Simon (*Journal de Méd. et de Chir. Pratique*, March, 1888) says: We know of the gravity that may attach to simple coryza in the new-born child, and how it prevents nursing and troubles its sleep, while, should it become chronic, it may give rise to serious lesions. Coryza, too, is much more serious in infants than when it occurs later as a secondary condition following rubeola, or is dependent upon syphilis.

Laryngitis may show itself in a new-born child under peculiar aspects, and with such intensity as to give the appearance of croup, thus reminding us of spontaneous croup, though this is almost unknown in early infancy. The child, who appears to be suffering from a common cold, is suddenly seized with violent dyspnœa, and this gives rise to epigastric depression on each inspiration, and sometimes to suffocation. We must remember that, if stridulous laryngitis does not attack the new-born child, he is certainly liable to forms of laryngitis with spasmodic phenomena which are much more prolonged than in the latter. Briefly, the forms of laryngitis are sufficiently varied in the infant to suggest great reserve in prognosis.

Tracheitis in children over two years of age is more frequent than is generally supposed. It is often accompanied by spasmodic symptoms without involving either the larynx or the bronchia. The patients often have a spasmodic cough that might easily be referred to pertussis or false croup. The prognosis is usually good.

The prognosis of broncho-pneumonia varies widely in accordance with its many forms. These may be divided into three groups. In certain cases it may be rapidly fatal; in a child which at first appears to have no more than a light form of bronchitis, the symptoms become suddenly more marked, and their intensity is sometimes so great as to cause death within two or three days. The subacute form is oftener seen; it continues for eight or ten days, and is not usually dangerous. It differs from the third form, which also is of slow development, and may last for a month or more. Its chief characteristic is its irregularity, for, during its continuance, it gets better and worse, and makes the prognosis absolutely uncertain. Its course is somewhat as follows: During the first eight days, the issue seems destined to be fatal; then there is an amelioration in the general condition, the fever diminishes, and the signs of pulmonary induration give way. This mobility is a good sign. Then a new aggravation follows, and, after many alternations, the patient—provided its friends have not grown tired of medical intervention—gets well. From a prognostic point of view, it may be said that broncho-pneumonia, so serious in its rapid forms, is curable in fifty per cent. of the cases whose course has continued from ten to fifteen days.

It is a rule that, when a child presents an inexplicable febrile condition, to examine its throat, even if no symptom is present which may point to respiratory troubles; but, if no knowledge is gained from such examination, the state of the kidneys should be ascertained. Congestions in this region are very frequent in infants, and are shown by a certain degree of albuminuria and a more or less pronounced œdema. At the same time, anasarca, without albuminuria, is not rare in infants. Often, also, partial and motory œdema, referable to nephritis, is difficult of differentiation from that brought about by other affections. In pertussis, for instance, there is often an œdematous tumefaction of the face; it nevertheless presents this peculiarity, that it is firm, and is accompanied by a certain degree of coloration which is not found in œdema of renal origin. This œdema of pertussis may be compared with that produced in bronchic adenitis, and it may also be confounded with that which almost always exists in pertussoid cough.

Finally, partial œdema of the neck is often pathognomonic of diphtheria. It is not rare in children's cases to observe that, while there is no sign of angina and no pain, there is an œdematous swelling of the neck and the inferior portion of the face, which we must know how to recognize as being characteristic of this malady. As to œdema of cardiac origin, it is the last diagnostic point we have to think of in children's

cases, for, when it shows in them at all, the signs of heart-affection are so well developed that they cannot be misunderstood.—*New York Med. Abstract*, May, 1888.

Congenital Ectocardia.

At the meeting of the *Société médicale des Hôpitaux*, July 13, 1888, M. Huchard presented a woman, 36 years old, who had congenital ectocardia. The heart pulsates in the epigastrium, where it can be grasped with the hand. The alternate contraction of auricles and ventricles can be seen very distinctly. A curious fact is that the pulsations of the heart are perceived better above the heart than on a level with it. This malformation proceeds from an arrest of development of the lower part of the sternum, and of the upper part of the muscles of the abdomen.

The woman had had four confinements. Since the last, the deformity has become pronounced, and the heart more prominent than it was before. Below the heart is a large hernia, which has a tendency to increase. M. Huchard proposes to have an apparatus made to protect the heart and retain the hernia.—*Bulletin Médical*, July 18, 1888.

Traumatic Diaphragmatic Hernia.

Mr. James W. G. Farwell reports a case of this kind in the *Lancet*, June 30, 1888, which he thinks is remarkable in that the patient lived sixteen years after the accident. It seems that Mr. Farwell was sent for, one evening, to see a man who had been caught between the bumpers of two cars, which he had just uncoupled, the blow striking him in the abdomen. No bruising of the skin of the abdomen was apparent, no ribs were fractured, there was no dyspnœa, but great collapse. From the latter, however, he soon recovered. Every now and then, he experienced sudden paroxysms of pain, acutely spasmodic in character, and referred to the abdomen. This pain occurred chiefly when he was in bed, and, while it lasted, the muscles were very rigid. These paroxysms continued for several weeks, but there was no sickness, dyspnœa, or any other bad symptom. He recovered sufficiently in six weeks' time to resume work, but he now acted as night-signalman, which post he held until his death, sixteen years afterward. He walked daily five miles to and fro to his duties, and, when at home, was able to look after his garden. During this time he enjoyed good health, only occasionally suffering with slight dyspepsia, which yielded readily to simple remedies. One feature may be noted: his complexion became muddy in color, the lips blanched, the tongue bloodless, all of which Mr. Farwell thinks pointed to splenic mischief. Sixteen weeks before death, the dyspepsia grew worse, and he had rigors simulating attacks of ague, and the bowels were very relaxed. One month before death, Mr. Farwell was called to see him, and found him suffering great pain from flatulent distension of the abdomen; pulse weak and frequent; skin cold and expression anxious; no dyspnœa, cough, or vomiting, but much purging, the motions being of a dark color. These symptoms increased in severity, and he sank gradually, being unconscious for some hours before his death.

At the autopsy, the stomach and some of the small intestines were found lying upon the left lung, which was only one-fifth its usual size, but otherwise healthy. Both stomach and intestines were enormously distended with flatus. The liver was pale, the left lobe being atrophied; spleen very flat and pale, and much thinned. A large opening was found in the diaphragm, through which three fingers could easily be passed. The heart was pale and flabby.

Treatment of Rupture of the Uterus.

At the meeting of the Second Congress of the German Gynecological Society, at Halle, May 26, 1888, Dr. Leopold, of Dresden, read a paper on treatment of rupture of the uterus, in which he said that he had met this accident five times in 6100 births; in four cases it was complete, and in one incomplete. He concludes that delivery should be undertaken in the way that is best for the mother. If the child has been in great part or wholly thrown into the abdominal cavity, laparotomy alone should be considered. Even if there is an opportunity to extract by the feet, this should not be done, as traction may make the injury to the uterus greater. A binder accomplishes good in some cases, and sufficient drainage should be provided. In discussing Dr. Leopold's paper, Dr. Battleher, of Carlsruhe, asked whether or not, in a case in which pregnancy occurred after recovery from rupture of the uterus, a Cæsarean section should be made. He had, after a rupture of the uterus, twice done the Cæsarean operation in the same woman with good results. His advice is, not to wait till the end of pregnancy.—*Deutsche med. Wochenschrift*, July 26, 1888.

THE
MEDICAL AND SURGICAL
REPORTER.

ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D., EDITOR.

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Make communications as short as possible.
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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

THE CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

During the week just ending, an event has occurred which marks an era in the history of medicine in the United States. The gathering in Washington of the members of eleven national societies, made up of men chosen for membership by reason of their attainments as general or special practitioners, and their organization into a Congress, is an event which cannot fail to have a most important influence upon the whole profession. Gathered from the North and South, the East and West, this body included a very large proportion of those who have attained distinction, at home and abroad, for their scientific attainments and their skill as practitioners. In a country so vast as ours, it is not to be expected that any organization can bring together all who might fitly be included in it; but the Congress which has just held its first session came as near to this as could be expected at this time. The names enrolled may be compared without fear with those which appear in the roll of any national association of medical men in any part of the world, and the proceedings of the Congress have rarely been equalled for scientific value or practical worth. American physicians and surgeons may well be proud in contemplating what these their representatives have accomplished, and follow with hearty good wishes the sequel of so auspicious a beginning.

So much of the Congress itself. But there is an aspect of this event which is likely to attract almost as much attention as that to which we have just alluded. This aspect is the relation which the Congress of American Physicians and Surgeons will bear toward the American Medical Association. It is no secret that a number of the members of the latter body regard the Congress as a rival, and its success as likely to injure the Association. Time alone can decide whether or not this feeling is well founded; but we hope that it may prove to be unfounded. We believe that it will prove unfounded, if those who are attached to the Association make no mistake as to the relative spheres of the two bodies. As we understand the matter, there should be no rivalry between them, except such a generous rivalry in scientific attainments as is compatible with entire harmony of feeling. It is pleasant to note, among the members of the Congress, a number of men who have contributed in the past to the best work of the Association, and who may be expected to add lustre to its future proceedings.

In the nature of things, it is to be expected that the Congress will attract more scientific papers than the Association, and that it will require great judgment and great labor to keep the scientific standing of the Association on a level with that of the Congress.

Indeed, it is not unreasonable to fear that the scientific proceedings of the Association may never compare, in the eyes of unprejudiced men, with those of the Congress; but, even if this fear should be realized, the work of the Association need not come to an end.

It must not be forgotten that one of the most important parts of the mission of the Association is to bring together a large number of the medical men of our country in friendly and social intercourse. The constitution of the Congress is, to a certain extent, exclusive; the constitution of the Association is intended to include all the reputable physicians of the United States. The latter is the body in which all may gather to promote unity of feeling and harmonious regard between the rank and file of the profession.

This is the office of the Association which we believe deserves the greatest consideration just now; and we trust that those who feel most seriously that the meeting of the Congress marks a crisis in the medical affairs of our country will regard the circumstances with calmness and judgment, and be incited by them to earnest endeavors to make the Association more dear than it has ever been in the past to the hearts of all right-minded men. If this be done, the success of the Congress and the success of the Association will go hand in hand, and each body will fill out the measure of the other's usefulness.

TRANSPLANTATION OF SKIN FROM A CORPSE.

The attempt to transplant skin from a dead body to a living one on the human subject was first made, we believe, in this country a few years ago. The success obtained was such as to encourage further attempts, but we are not aware that such attempts have been systematically carried out. At the time of this operation, we hoped that it might soon be repeated, and that America might have an undisputed claim to the credit of so bold and singular an enterprise. But the operation seems not to have been followed up, and now a report comes from Germany which is likely to imperil the claim of our country for having originated it.

In the *Berliner klinische Wochenschrift*, August 6, 1888, Dr. Bartens, of Roda, reports the case of a boy, fourteen years old, who came under his care for the treatment of deep burns of the foot, which had destroyed almost all the skin on the upper surface of both feet and of the legs near the malleoli. After failing to secure regeneration of the skin by other methods, he decided to try transplantation. The condition of the patient was so unfavorable that Dr. Bartens could not use his skin for this purpose, and no donor was at hand. He therefore took two large pieces of skin from the calf of the leg of a man seventy-five years old—who had just died—within twenty minutes after his death, laid them in lukewarm water to which a little common salt had been added, carried them to the bedside of the patient, freed them from their subcutaneous fat, cut them into pieces about one-third of an inch wide and from one-third to two-thirds of an inch long, and laid them on the ulcerated surfaces after these had been carefully washed with warm water. The whole of the fields of operation was now sprinkled with iodoform and covered with a cotton dressing. The whole operation lasted for an hour and a half after the death of the man from whom the skin was obtained. Each foot received fourteen grafts. After six days, the first dressing was removed, and it was found that twenty-four of the twenty-eight grafts had become attached. The surfaces were washed with a weak solution of permanganate of potash, and covered with a dressing like the first. Four days later, this was removed, and the grafts found to be doing well, and to be sensitive to needle-pricks and light touching. In due time, the whole of the ulcerated surfaces was covered with good skin, and this was so elastic that the patient could run and

execute all movements of the foot without difficulty.

This admirable and remarkable result must surely attract wide-spread attention to the method of transplanting skin from a dead body to a living one. There seems to be no good reason why it should not be entirely practicable, and we hope it will be taken up again on this side of the sea. The idea of thus incorporating into a living body portions of one which has ceased to live, as a body, is very curious, and suggests reflections which have nothing to do with surgery, especially when, as in the case just described, the body is that of one who has passed the age of three-score years and ten. But we have to do now only with the surgical aspects of the case, and commend it to the attention of our readers for its practical uses only.

THE STUDY OF CHILDREN'S DISEASES.

In an excellent editorial, the *British Medical Journal,* August 18, 1888, calls attention to the importance of studying the diseases of children, as distinguished from those of older persons, and congratulates the British Medical Association that after a lapse of five years this subject has been deemed important enough to be considered by a special section. It is quite true, as is stated in the editorial referred to, that children's diseases are not a specialty in the same sense that diseases of the eye or those peculiar to women are, and it is to be hoped the day may never come when they will be so regarded. Such an idea will be opposed by none more vigorously than by those who have made a special study of them. Children are but men and women in miniature, and this is quite as true of them in regard to diseases as to the ordinary affairs of every-day life. With the exception of the preliminary troubles in reference to feeding and the disorders connected with, and perhaps arising out of, the developmental processes of the first two years of life, there is little difference between the diseases of children and those of adults, save that the former are less liable to be complicated by the previous habits of the patient, and are therefore so much the easier to recognize and also the more amenable to treatment.

To this presentation of the case, more might be added by those who have made a study of the peculiarities of the vegetative functions in children and of their mental and nervous development. When all is considered, there will be no hesitation, in this country, in agreeing with the *British Medical Journal* that the diseases of children deserve to be made the object of special study in medical schools. To this we would add that they ought, more perhaps than the diseases of adults, to be made the subject of clinical instruction. Those who have had the advantage of seeing the way in which Monti, in Vienna, teaches his students how to diagnosticate and treat the diseases of little children must always hope that in our own country some such method will be adopted to instruct the rising generation of medical men in the rare art of dealing kindly, wisely, and successfully with the little ones.

The principle of regarding with due consideration the diseases of children as a sort of specialty—a sort which every practitioner must learn—is not ignored in America; but something remains to be done, we think, in applying it. The time is gone, never to return, when one professor was supposed to be able to teach, in two courses of lectures, obstetrics and the diseases of women and children; and we may expect that before long the diseases of children will be taught as they ought to be all over the civilized world.

MEDICAL DOGBERRYS.

Not long since, some stir was made in Philadelphia over a case of suspected cholera, and the way in which it was dealt with by the health authorities. According to the

published reports in regard to it, a friendless person was taken sick, somebody declared the disease was cholera, the Health Officer was informed of this by telegram, and he at once issued an order for the removal of the patient to the Municipal Hospital for contagious diseases. The victim was really suffering with cholera morbus, and died before the order could be carried into effect. Some zealous persons at about this time, not content with the authority lodged in the Health Officer, proposed the passage of a law giving to the Lieutenants of Police authority to order the removal of persons believed to be suffering with a contagious disease to the Municipal Hospital. The object contemplated by the proposers of this law is an excellent one; and it is quite possible that their idea of the way to effect it was wiser than appears on the surface. Still, in the form suggested, it could not be approved by persons of discretion. It is well that the health authorities of any city should have power to isolate persons likely to spread a contagious disease; but the authority needs to be exercised with unexceptionable prudence, or it would constitute an intolerable invasion of the rights of citizens.

From what occurred in the case referred to, it appears that even an officer specially authorized to discharge this function may be carried away by fear and false information, and use it unwisely and dangerously. Under these circumstances, it is very clear that his authority ought not to be extended to persons entirely unfamiliar with matters of health and the science of medicine. Such persons could not fail to be medical Dogberrys, and no amount of lecturing to them in police stations would make them anything but a nuisance and oppression to those whom they are intended to defend and protect. As it is, there is some ground for believing that individuals from whom better things might be reasonably expected are at times very like medical Dogberrys, and that they sometimes get hold of the middle part of the old injunction "*tuto, cito, et jucunde*," when it would be better if they had a good grip on its extremities.

PAMPHLET NOTICES.

We call the attention of our readers to the department of "Pamphlet Notices" in the REPORTER, which is intended to serve a double purpose: first, to give the readers of the REPORTER a systematized *résumé* of the medical papers which are reprinted and made available for those who do not see the journals in which they originally appear; and second, to bring their authors and our readers into closer relations, for their reciprocal pleasure and profit.

It is pleasant to have—as we have had—evidence that both these objects are being attained; and we expect that this department of the REPORTER will prove an interesting and useful one. In concluding, we beg our readers, who write for these reprints, not to overlook the suggestion printed at the head of the column of Pamphlet Notices, and *always* to enclose a postage-stamp with the request for a copy. This is the least which can be done by those who ask the favor, and who ought to make it as easy as possible for the author to grant it.

SHAM MEDICINES.

Amid the confusion caused by the claims of various preparations presented to the public as remedies for disease, and the charges made against them, there is great advantage in having them analyzed by competent and disinterested persons. A great variety of such remedies has been examined by Dr. B. F. Davenport, the Analytical Chemist of the State Board of Health of Massachusetts, and the results of his analyses are published in the *Boston Journal of Health*, September, 1888. The results of his analyses of a number of so-called opium-cures and tonics and bitters we republish in another part of this number of the REPORTER, and invite the attention of our readers to them, for their own information and that of their patients.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

INTRACRANIAL TUMORS. By Byrom Bramwell, M.D., F.R.C.P.E., F.R.S.E., Lecturer on the Principles and Practice of Medicine in the Extra-Academical School of Medicine, Edinburgh, etc., with one hundred and sixteen illustrations. Philadelphia: J. B. Lippincott Company, 1888. 8vo, pp. xiv, 270. Price, $4.50.

There have been few books issued from the medical press of this or any other country which can compare with this magnificent volume. It is printed in the most admirable way, and its illustrations are unusually fine. The latter include such beautiful engravings and reproductions of photographs, showing the macroscopic and microscopic appearances of a great variety of morbid conditions of the brain and its adulxa, that it is hard to find words to express the admiration they excite. And these attractions of the book are entirely in keeping with the scientific merits of its contents. Dr. Bramwell is well known as a careful observer and an able writer, and his reputation—already sufficiently established—will only be enhanced by this work. No careful student of brain-pathology can afford to be without it, and we can recommend it in the most unqualified terms to the attention of our readers.

DIE TECHNIK DER MASSAGE. Von Dr. Albert Reibmayer. (THE TECHNIQUE OF MASSAGE. By Dr. Albert Reibmayer.) Third edition, enlarged and improved, with 162 wood-cuts. Leipzig and Vienna: Toeplitz and Deuticke.

This volume gives in concise form a full and instructive account of the various manipulations included under the general term "massage." The simple manipulations are first described, the clearness of the text being much enhanced by the numerous cuts. The massage of several of the more important regions of the body is then taken up, the massage of the uterus receiving special attention. Then come chapters on massage of the whole body; a description of the instruments and apparatus used; and a chapter on "General Remarks," which embodies the author's conclusions. A systematic account of active and passive motion properly ends the book. The author's style is clear and readable, and gives additional ground for recommending the work to those of our readers familiar with German.

PARTIAL SYLLABIC LISTS OF THE CLINICAL MORPHOLOGIES OF THE BLOOD, SPUTUM, FECES, SKIN, URINE, VOMITUS, FOOD, ETC. By Ephraim Cutter, M.D., Etc. 8vo, pp. 81. New York: Published by the author, 1888. Price $1.00.

Most persons who take this book in hand will probably be disgusted at the outset by the vanity and desire for self-aggrandizement apparent on the title-page, which is crowded with titles of the author and a list of his previous publications. Nor is this impression likely to diminish in turning over its pages, which contain a great deal which might perhaps be put to a useful purpose by one of a judicious mind, but which here is simply tiresome. It is a pity that one who is so industrious and persistent as Dr. Cutter should not be more fortunate in his manner of presenting his views to his professional brethren.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

Drug Interference. By Thomas J. Mays, M.D., Philadelphia. From the *Therapeutic Gazette*, May, 1888.

Stricture of the Urethra; Urethrotomy Under Cocaine Anæsthesia. By Henry J. Reynolds, Chicago. From the *Western Medical Reporter*, April, 1888. 14 pages.

Note on the Treatment of Syphilis by the Hypodermatic Injection of Calomel. By J. C. Wilson, M.D., Philadelphia. From the *Medical News*, June 2, 1888. 18 pages.

—Dr. Mays presents, in this paper, a study of the effects of maximum and minimum doses of certain drugs upon the action of the frog's heart. These effects are illustrated with tracings, and suggest interesting thoughts in regard to the operation of the drugs used, as well as in regard to the general question of therapeusis. Dr. Mays states the ideas which they have suggested to him; and, while these may not be regarded by all who read them as a necessary conclusion to his premises, they are worthy of serious consideration, especially as examples of a habit of thoughtful observation which may be commended to all who desire to enrich the science of medicine by some good work of their own.

—Dr. Reynolds's pamphlet contains a reprint of a clinical lecture delivered at the College of Physicians and Surgeons of Chicago. In it the steps taken in examining and operating upon a case of stricture are well described, and the operation of internal urethrotomy is especially recommended.

—Dr. Wilson describes clearly and succinctly the method of treating syphilis with hypodermic injections of calomel, which is, of course, familiar enough to all who are conversant with the modern German literature of venereal diseases, but which has never been brought prominently to the attention of the medical profession in this country. This method has given very satisfactory results in the hands of a number of European physicians, and has much in its favor. Dr. Wilson reports the results he has obtained in the treatment of twelve cases, and describes admirably the way in which this method should be carried out, stating very fairly its advantages and its occasional disadvantages.

Literary Notes.

Scribner's Magazine gets more interesting and attractive all the time. The articles on railways, which are the leading feature just now, are admirably written and magnificently illustrated, and the merit of the other articles is in keeping with the general high tone of the magazine.

The number for June contains an article on hospital life, which must interest the lay readers very much; but it has a special charm for those whose experience makes them familiar with the working of the ambulance system in large cities, and the inside history of hospitals.

CORRESPONDENCE.

Milk Inspection.

TO THE EDITOR.

Sir: In your editorial on "milk inspection," in the REPORTER for September 8th, occurs the following: "A tour of inspection among the retailers of milk to the poor would, we think, do more to correct the horrible cheating, etc." Now that is precisely what Dr. Nevins does, in addition to his descents upon dealers as they load their wagons at the railway stations, or drive off the ferry-boats. It has been my privilege to accompany him on one of his daily tours among the "shops" on the East Side, and I can testify to the thorough and fearless manner in which he performs his by no means pleasant duties. You say truly that he is "a most efficient and zealous public officer."

This is written more for the purpose of supplying information, the absence of which is indicated in the editorial referred to, than for publication, yet I have no objection to the latter use being made of it, if it pleases you so to do.

Yours truly, OBSERVER.

New York,
September 11, 1888.

Epilepsy—A Case.

TO THE EDITOR.

Sir: If space will permit, let me report the following case of epilepsy, which has been of several years' duration.

In the early part of May last, I was consulted, as a "new doctor" recently located in this town, by a young woman 19 years old, suffering from scrofula, and, as a sequel or resultant, with epileptic attacks of the *grand mal* type. The latter were of frequent occurrence and varied in number from one to three a day. I learned from the patient her family history, which, so far as she or her relatives could give, was good. This young woman first gave signs of scrofula when 12 years old. It grew constantly worse until she was 14, when she began to have epileptic attacks. From then until May 15, two weeks after coming under my care, it was never safe to leave her alone.

My first prescription for her consisted of the bromides in large doses. As she told me she had tried many doctors, all of whom prescribed some one of the bromides, I also ordered for her syrup of the iodide of iron in fifteen-drop doses. This I kept up for two weeks, but failed to see any benefit. I then gave the following:

℞ Potass. bromid. . . . . ℥i
Sodii bromid. . . . . ℥i
Tinct. belladon. . . . . f℥ss
Aquam . . . . . q. s. ad f℥vj
M. Sig. Teaspoonful after each meal. *To be increased.*

For the scrofula, I ordered syrup trifolium comp. in large doses. From the first days of these prescriptions, her condition changed, and she is to-day a comparatively new woman. Her catamenial flow was irregular, but is now normal. Her looks, habits, etc., promise a permanent cure.

Yours truly, J. R. HUNTT, M.D.

Laurel, Md.,
September 2, 1888.

NOTES AND COMMENTS.

Bad Drainage and Suits for Damages.

The *Lancet*, August 4, 1888, comments on a suit for damages, which may be of medico-legal interest to readers on this side of the Atlantic. It seems that a case came before the Court of Appeal, in which the plaintiff had bought a house from the defendant; the latter, in answer to an inquiry as to the state of the drains, stated that he had spent $240 in putting them in order. Relying on this statement, the house was purchased; but soon three members of the plaintiff's family were suffering from enteric fever. On this occurrence taking place, the drains were opened up, and a condition of things was discovered which involved, amongst other things, the removal of forty cart-loads of sewage-contaminated earth. For the alleged misrepresentation, the illness, the alterations, and the consequent expenditure, the plaintiff sought relief; but the jury found for the defendant, on the ground that he had been as much deceived by the builder as the plaintiff, and that there had been no fraudulent misrepresentation. The Divisional Court refused a new trial, and this refusal has been confirmed by the Court of Appeal, mainly on the ground that there had evidently been no wilful deception on the part of the defendant. The case, remarks the *Lancet*, is instructive as showing the limit of responsibility as regards persons selling or letting houses in the present state of the law, and as indicating the desirability, on the part of persons buying or leasing house-property, of securing a definite warranty from the owners as to the sanitary conditions of the property before purchase.

Sham Medicines.

Opium "Cures."—Dr. B. F. Davenport, Analytical Chemist of the Massachusetts State Board of Health, says he has found by analysis that the twenty varieties of "cures," all of which contain opium, are as follows:

H. L. Baker, Toledo, Ohio.
J. C. Beck, Cincinnati, Ohio.
Chas. C. Beers, New York City.
Geo. A. Bradford, Columbus, Ga.
P. B. Bowzer, Logansport, Ind.
J. S. Carleton, Chicago, Ill.
S. B. Collins, La Porte, Ind.
B. S. Dispensary, Berrien Spring, Mich.
J. A. Drollinger, La Porte, Ind.
J. R. A. Dunn, Elizabeth, N. J.
J. C. Hoffman, Jefferson, Wis.
H. H. Kane, New York City.
L. E. Keeley, Dwight, Ill.
F. E. Marsh, Quincy, Mich.
L. Meeker, Chicago, Ill.
Wm. P. Phelan, Chicago, Ill.
Salvo Remedy, New York City.
W. B. Squire, Worthington, Ind.
J. L. Stevens, Lebanon, Ohio.
B. M. Woolley, Atlanta, Ga.

"Tonics" and "Bitters" Containing Alcohol.—Beer and ale contain from three to seven per cent. of alcohol. In sherry wine there is from eighteen to twenty per cent., and in whiskey and brandy fifty per cent. of alcohol. Now, nearly all the patent medicine "tonics" and "bitters" contain a large amount of alcohol; hence it is easy to be seen why the indulger in what he considers "his medicine" "feels better."

The following are Dr. Davenport's analyses—for alcohol—of a number of tonics and bitters on the market. The per cent. given is of alcohol:

Carter's Physical Extract, Georgetown, Mass. Dose, one tablespoonful, three times daily. 22 per cent.

Hooker's Wigwam Tonic, Haverhill, Mass. Dose, one tablespoonful, three times daily. 20.7 per cent.

Hoofland's German Tonic, Philadelphia. Admitted to contain Santa Cruz rum. Dose, wineglass, four times daily. 29.3 per cent.

Hop Tonic, Grand Rapids, Mich. Dose, one tablespoonful to wineglass, three times a day. 7 per cent.

Howe's Arabian Tonic, New York. Advertised as "not a rum drink." Dose, tablespoonful to wineglass, 4 times daily. 13.2 per cent.

Jackson's Golden Seal Tonic, Boston. Admitted to contain Marsala wine. Dose, half a wineglass, three times daily. 19.6 per cent.

Liebig Co.'s Coca Beef Tonic, New York. Advertised to be made "with sherry." Dose, two to four teaspoonfuls, three times daily. 23.2 per cent.

Mensman's Peptonized Beef Tonic, New York. Acknowledged to contain spirit. Dose, one to three tablespoonfuls, three times daily. 16.5 per cent.

Parker's Tonic, New York. Claimed to be purely vegetable extract. "Stimulus to the body without intoxicating." "Inebriates struggling to reform will find its tonic and sustaining influence on the nervous system a great help to their efforts." Dose, as a tonic, one to two teaspoonfuls, one to three times daily. 41.6 per cent.

Schenck's Sea-Weed Tonic, Philadelphia. Claimed to be "distilled from seaweed after the same manner as Jamaica spirits is from sugar-cane. It is therefore entirely harmless, and free from the injurious properties of corn and rye whiskey." Dose, half wineglass three times daily. 19.5 per cent.

Atwood's Quinine Tonic Bitters, Boston. Dose, half tablespoonful to half wineglass, mixed with water, wine, or spirit, three times daily. 29.2 per cent.

L. F. Atwood's Jaundice Bitters, Portland, Me. Dose, half tablespoonful to half wineglass, one to six times daily. 22.3 per cent.

Moses Atwood's Jaundice Bitters, New York. Dose, half tablespoonful to wineglass, one to six times daily. 17.1 per cent.

H. Baxter's Mandrake Bitters, Burlington, Vt. Dose, one to two tablespoonfuls. 16.5 per cent.

Boker's Stomach Bitters, New York. Dose not given. 42.6 per cent.

Brown's Iron Bitters, Baltimore, Md. Claimed to be perfectly harmless. "Not a substitute for whiskey." Dose, tablespoonful. 19.7 per cent.

Burdock Blood Bitters, Buffalo, N. Y. Dose, teaspoonful to tablespoonful, three times daily. 25.2 per cent.

Carter's Scotch Bitters, Georgetown, Mass. Dose, tablespoonful to wineglassful, as occasion requires. 17.6 per cent.

Colton's Bitters, Westfield, Mass. Dose, teaspoonful to two tablespoonfuls three times daily. 27.1 per cent.

Copp's White Mountain Bitters, Manchester, N. H. "Not an alcoholic beverage," according to the claims made for it. Dose, wineglassful. 6 per cent.

Drake's Plantation Bitters, New York. "Contains St. Croix rum." Dose, wineglassful three times daily. 33.2 per cent.

Flint's Quaker Bitters, Boston. Dose, teaspoonful six times daily. 21.4 per cent.

Goodhue's Bitters, Salem, Mass. Dose, half wineglassful. 16.1 per cent.

Hartshorn's Bitters, Boston, Mass. Dose, tablespoonful to half wineglassful. 22.2 per cent.

Hoofland's German Bitters, Philadelphia. Advertised to be entirely vegetable, and free from alcoholic stimulant. Dose, tablespoonful, four times daily. 25.6 per cent.

Hop Bitters, Rochester, N. Y. Dose, one to three tablespoonfuls, three times daily. 12 per cent.

Hostetter's Stomach Bitters, Pittsburgh, Pa. Dose, wineglassful, three times daily. 44.3 per cent.

Kaufmann's Sulphur Bitters, Boston. "Contains no alcohol," according to advertisement. Dose, tea to table spoonful. It contains no sulphur, but has 20.5 per cent. alcohol.

Kingsley's Iron Tonic, Northampton, Mass. Dose, one to two teaspoonfuls, three times daily. 14.9 per cent.

Langley's Bitters, Boston. Dose, half wineglass or more, three times daily. 18.1 per cent.

Liverpool's Mexican Tonic Bitters, Boston. Dose, half to full wineglass, three times daily. 22.4 per cent.

Oxygenated Bitters, New York. Dose, tea to table spoonful. Acid, but no alcohol.

Pierce's Indian Restoration Bitters, Boston. Dose, up to wineglassful, and to six times daily. 6.1 per cent.

Z. Porter's Stomach Bitters, New York. Dose, tablespoonful or more, several times daily. 27.9 per cent.

Rush's Bitters, New York. Dose, wineglassful, four times daily. 35 per cent.

"Dr." Richardson's Concentrated Sherry Wine Bitters, Wakefield, Mass. Dose, tablespoonful to half wineglassful or more, three times daily, "or when there is sensation of weakness or uneasiness at the stomach." 47.5 per cent.

Secor's Cinchona Bitters, Providence, R. I. Dose, half wineglassful, three times daily. 13.1 per cent.

Shonyo's German Bitters, Concord, N. H. Dose, tablespoonful to wineglassful. 21.5 per cent.

Job Sweet's Strengthening Bitters, New Bedford, Mass. Dose, tablespoonful to wineglassful, three times daily. 29 per cent.

Thurston's Old Continental Bitters, Lynn, Mass. Dose, teaspoonful to two tablespoonfuls 11.4 per cent.

Walker's Vinegar Bitters, New York. Claimed to be free from all alcoholic stimulants. "Contains no spirit." Dose, half to full wineglass. 6.1 per cent.

Warner's Safe Tonic Bitters, Rochester, N. Y. Dose, tablespoonful to wineglassful. 35.7 per cent.

Warren's Bilious Bitters, Boston, Mass. Teaspoonful to two tablespoonfuls, one to three times daily. 21.5 per cent.

Wheeler's Tonic Sherry Wine Bitters, Boston. Dose, two-thirds wineglass, twice daily. 18.8 per cent.

Wheat Bitters, New York. Dose, dessert to wineglass, three times daily. 13.6 per cent.

Faith Whitcomb's Nerve Bitters, Boston. Dose, tablespoonful, three times daily. 20.3 per cent.

Dr. Williams's Vegetable Jaundice Bitters, Lowell, Mass. Dose, half to full wineglass, once daily. 18.5 per cent.—*Boston Journal of Health*, September, 1888.

A Simple and Efficient Water-Filter.

Dr. F. A. Castle says, in the *N. Y. Medical Journal*, July 7, 1888: For a long time I have used, in my butler's pantry, a simple contrivance for filtering water used on the table, which has been so serviceable and at the same time so inexpensive that I venture to recommend it. I took an ordinary glass pharmaceutical percolator and packed the outlet with absorbent cotton so tightly that the water could only flow in drops. By means of a piece of copper wire for a bale, it was suspended from a hook on the lower side of one of the pantry shelves, over the shelf of the sink. As often as necessary, water is poured into the percolator, and the water-pitcher is placed under the outlet. Whenever the cotton shows much discoloration (a thing which is easily observed, owing to the percolator being of glass), the maid replaces it with fresh absorbent cotton. It is in all respects the most practical and cheapest filter I know of, and has no machinery to get out of order, no patent-right to carry, and the advantage over most filters that the filtering medium is always under observation, so that there is little risk of contamination of the water by accumulations of filth.

Prescription for Gastralgia.

Weissenberg's formula is (*Union Médicale du Canada*, July, 1888):

Hydrochlorate of cocaine . . . . gr. 1½
Extract of belladonna . . . . . gr. 7½
Powdered rhubarb
Extract of rhubarb . . . . . āā q. s.
M. Ft. pil. No. xx. Take one pill three times a day, at the moment of eating.

Pure Milk and Clean Dairies.

Dr. E. A. Wood, of Pittsburgh, who has devoted much attention to the study of milk, and how to obtain and to keep it pure, made the report of the Committee on Milk of the Allegheny County Medical Society, August 21. We give below some of his remarks upon this important subject:

Visit for yourself the dairy from whence you get your milk supply. Examine the cows, the stable, the kind of food the cows eat, the condition of the stalls, the method of milking, the vessels in which and the place where the milk is kept, and be sure and learn the length of time from the milking until it arrives at your door. Be your own milk inspector, is perhaps the most important advice which can be given you. You can detect faults in the groceries, or dishonesty in the grocer, but milk and the milkman are different from groceries and grocers. No other food requires such cleanliness and care in handling as milk, and no other tradesman has such hidden opportunities for wronging his customers.

The cow should be able to walk without halt or limp; the skin and hair should be soft and smooth and free from sores, tumors, and manure; the hoofs should be short and firm, and the cow itself in good flesh: if too fat, she is a beef and has been milked too long; if too lean, she is starving.

The cow-stable should be well aired and drained, and protected in winter. The cows should be stabled only in rough weather, and should never be chained, except at night in cold weather, when a warm stall is needed. In warm dry weather they should be free night and day, with sheds for shelter in case of storms. This rule would banish hundreds of narrow contracted dairies in our cities, and justly so. Shun the milk from cows that are stabled the year round as you would water putrid with carrion. Much milk is sold in our cities and towns from cows that are shut up in close and foul stables every night the year round, and, while most of them may be turned on goat-pastures for a few hours in the middle of the day, not a cow in the lot gives such milk as you should provide for your babe. Contrast such milk with the sleek cow's that stands in the country by day and sleeps through the dewy night in the glad fresh air.

The authorities should clean out many of our city dairies, the milk from which should not be used. The cow-stable would be all the better for being as clean as a kitchen, and, while this is perhaps impossible, the nearer approach to absolute cleanliness the purer and wholesomer the milk. But a certain amount of cleanliness is absolutely necessary. Stable-refuse in the stalls, and stench arising from any cause, will taint the best milk collected in the cleanest of vessels. Shun milk from stables that are foul with filth and stench. In good weather, the milking should be done in open clean yards, and, if possible, never in the stalls.

Milk that gets this fresh healthy start toward market will keep longer and better than milk fouled at the very instant of milking. There is a resisting power in such milk that enables it to endure the delay of the long and hot journey to your door. Do not buy milk from foul stables at any price. Milk from clean stables may cost you more, but you will save in the doctor's bill and may save an undertaker's bill.

If the dairyman refuses you an investigation, or even if he accords you a partial or reluctant welcome, shun him as you would a smuggler, and refuse his milk as you would the reception of stolen goods. His milk is not pure, and by buying it you encourage rascality and place an embargo on the honest milk dealer. The honest dairyman will court investigation, and not only welcome you, but aid you in every way to inspect his methods, the kind of food he gives his cows, the way he cleans and scalds and sun-dries his vessels, and the place where he keeps his milk.

There are a few bad signs you should note: It is a bad sign to see empty milk-pans and pails marked inside with the rings of former contents, or pans that give out a perceptible odor. It is a bad sign to see a greasy wagon or barrel about the premises, smeared with the grimy stains of putrid distillery-slop. It is a bad sign to see a churn about a milk dairy—the sign that the cream is stolen out of the milk sent to the customers. It is a bad sign to see meat or vegetables in the same room or in the ice-chest in which milk is kept. Finally, it is a bad sign to see untidy men and women about. Any one of these bad signs points unerringly to a faulty milk supply from that dairy.

Not Cruel if for Profit.

The London correspondent of the *New Orleans Med. and Surg. Journal*, August, 1888, says:

"A case recently before the Justiciary Appeal Court at Edinburgh gave occasion for a very neat illustration of the state of the law with regard to experiments on animals; the question was whether it was contrary to law to dishorn cattle; it was stated that the practice had been introduced from America, and consisted in sawing off the horns within an inch of the skull, the operation being extremely painful. In deciding that the operation was not illegal, Lord Young quoted the opinion that, 'if you opened an oyster for the purpose of eating it, that was lawful and quite right; but that, if you opened it for the purpose of science, it was against the statute and was a punishable offense.'"

Multiple Hunterian Chancres.

In the *St. Petersburg Vratch*, No. 30, 1888, p. 584, Dr. Lazar G. Volynetz, House Physician to the Alexandrovsky Hospital, in Kharkov, describes a curious case in which three syphilitic chancres were present in a strong and generally healthy fireman, 28 years old. The chancres appeared simultaneously about the eighteenth day after the patient's last coition. On examination on the twelfth day of the disease, there were found: (1) a typical Hunterian ulcer measuring 1 x ¾ centimetre, and situated on the lowest portion of the external fold of the prepuce, on the right side; (2) a cartilaginous induration, with a fresh central scar, of the size of a shilling-piece, situated on the left side of the internal fold of the prepuce; and (3) a somewhat smaller but similarly hard induration, with a recent cicatrix, situated on the lower aspect of the penis, near the scrotum. The inguinal, cubital, and cervical lymphatic glands were strikingly enlarged and hard, but indolent. Under the local application of a mercurial plaster, all the three primary indurations rapidly disappeared. Dr. Volynetz dwells upon the great rarity of cases of multiple syphilitic chancre, and mentions three other instances, namely: Ricord's case, in which there were nineteen hard chancres in a man, and Kaposi's two cases occurring in women, in one of which two ulcers occupied the lower lip, and in another the lower jaw.

The multiplicity of chancres, however, is not nearly so rare as Dr. Volynetz seems to suppose. Professor A. Gay, of Kazan, in his capital *Course of Venereal Diseases*, third edition, 1888, p. 268, says that, according to his experience, a single primary induration occurs in 86.4 per cent. of male patients, while in the remaining 13.6 per cent. the number of the chancres varies from two to twelve. Of 316 cases of the kind, he saw 2 chancres in 216 cases; 3 in 68; 4 in 14; 5 in 15; 6 in 2; 7 in 2; 8 in 2; and 12 in 1. In one of the cases, the ulcers were situated—one on the penis, another on the upper eyelid; in another, on the penis and the right forefinger; and in a third there were found two Hunterian chancres on the left cheek and one on the nose, the patient having been bitten by a syphilitic person.

The Pupil as a Guide in the Administration of Chloroform.

As a result of experiments upon animals and of observations made upon man, Dr. H. I. Neilson, in the *Riforma Medica*, June 23, 1888, formulates the following conclusions: 1. The first effect of chloroform narcosis on the pupils consists in a dilatation which varies in intensity and duration in different individuals. As the anæsthesia becomes more profound, the pupils then begin to contract, and finally become very small and immovable. If now the chloroform is pushed still further, a sudden dilatation occurs, which is the result of asphyxia, from which the patient seldom recovers; 2. As long as the pupil is observed to dilate in response to sensory stimuli, such as pinching the skin, the anæsthesia is not yet sufficient to allow the commencement of the operation; 3. As soon as the pupil becomes strongly contracted and immovable, the administration of the anæsthetic must be suspended until a commencing dilatation is observed, and the patient must be held at just this point as long as the operation continues; 4. Vomiting causes a dilatation similar to that occurring as the patient emerges from the narcotic condition, but it is usually more sudden in the former case. In experiments upon dogs, it was found that the contraction of the pupils did not begin until the blood-pressure was somewhat reduced, and that the dilatation proceeded *pari passu* with the increase in the blood-pressure. The author regards the appearance of the pupil as a very reliable guide for the administration of the chloroform, as by it he is enabled to judge accurately concerning the condition of the patient.—*Medical Record*, August 18, 1888.

Salicylate of Mercury in Syphilis and Gonorrhœa.

Carl Szadek has been studying the effect of salicylate of mercury in syphilis, and publishes a communication on the subject in in the *Monatshefte für prakt. Dermatologie*, No. 10, 1888. He employed the salt internally in 25 cases of syphilis, using the following formula:

℞ Hydrarg. salicylat. . . . . gr. xv
Ext. et pulv. glycyrrhizæ q. s. ut fiant pil. No. lx
Sig. Three to six pills after meals.

The drug never caused any disagreeable gastric or intestinal disturbances. The mouth was carefully attended to, and salivation and stomatitis were never observed, even after the drug had been used a long time. In all cases in which the milder symptoms of secondary syphilis (roseola, mucous patches in the mouth and fauces) were present, the symptoms of the disease affecting the skin and mucous membranes began to disappear in a very few days. Szadek also tried intramuscular injections in 12 cases of recent syphilis, with maculæ and large and small papules, papular angina, etc. For this purpose he employed the mercury suspended in the following way:

℞ Hydrarg. salicylat. . . . . gr. iii
Mucil. acaciæ . . . . . ♏ivss
Aq. destil. . . . . f℥ii
Sig. For injection.

The injections were employed at intervals of two or three days, their number varying between 6 and 12. The pain caused by them was not worth mentioning, nor was the reaction of any significance. After as few as 3 or 5 injections, a decided influence upon the secondary symptoms of the disease was perceptible. In most cases, from 8 to 12 injections sufficed to cause the disappearance of the syphilitic symptoms. As after-treatment, Szadek employed the same salt internally.

He has also employed the salicylate of mercury as an injection for gonorrhœa, using it four or five times a day, according to the following formula:

℞ Hydrarg. salicylat. . . . . gr. iii
Aq. destil. . . . . f℥ viii
Sodii bicarb. . . . . gr. xv–xx
M. Sig. For injection.

As a rule, after three days, there occurred a diminution of the discharge; in from 14 to 21 days, recovery from an acute or subacute attack. At times, however, the drug entirely failed.

Szadek believes that he is justified in drawing the following conclusions as the result of his experiments: 1. The salicylate of mercury is not less active as an antisyphilitic agent than the other mercurial preparations hitherto employed; it is a very suitable preparation in the treatment of secondary syphilis. When employed internally, it soon causes the disappearance of the milder syphilitic symptoms, and is also very useful in the after-treatment. When employed in the form of intramuscular injections, it causes a complete disappearance of the syphilitic symptoms.

2. The drug occasions no disagreeable local symptoms; in this respect it is to be regarded as the best mercurial preparation known as present. 3. External use of the salicylate of mercury is very useful in different syphilitic infiltrations and ulcerations, bringing about their resorption and healing. 4. In acute and subacute gonorrhœa it also acts favorably, but it has no abortive action. *Wiener med. Presse*, July 8, 1888.

Pathology of Bright's Disease.

Gaucher (*Gazette Hebdomadaire*, xxxiv, 4, p. 52, 1888) has sought to prove that the large white kidney may be caused by poisons, not only such as are introduced into the organism, but also such as are formed in the organism itself as the result of incomplete oxidation of albuminoids, which poisons, like leucin, tyrosin, kreatin, and kreatinin, etc., are comprised in the series of extractives. If animals are injected for a long time with these solutions, the clinical and pathological picture of the large white kidney is obtained.

In the healthy human organism, these extractives are very sparingly found; but they increase in diseases of the liver—in cirrhosis of the liver, in icterus gravis, and the albuminuria observed in these diseases is to be referred to a nephritis arising through the accumulation of extractives. Probably this is developed also in other, perhaps in all, chronic diseases, and forms the basis of the albuminuria so frequently observed.

"Excessive ingestion or excessive production of extractives, deficient excretion of the latter, and already existing lesions of the kidney are the usual conditions which determine the development of the large white kidney."

As regards treatment, it follows that, when kidney-disease exists, food-stuffs rich in extractives (meat broth, extracts of meat, etc.) will make the condition worse, and are therefore to be avoided.—*Schmidt's Jahrbücher*, July, 1888.

An Unpremeditated Cæsarean Section.

The town of Titusville, Pa., has been very much excited over an unpremeditated Cæsarean section which was recently performed there by Dr. Varian. It seems that a young woman who was far advanced in pregnancy succeeded in imposing upon the credulity of her physicians to such an extent that she was thought to be suffering with an ovarian tumor. Pregnancy was suspected, but absence of the fœtal heart-sounds, taken in connection with the young woman's positive declarations that she could not be pregnant, led to the mistake in diagnosis. In an operation undertaken for the removal of the supposed tumor, the uterus was opened and a living child, weighing about eight pounds, extracted. Dr. Varian's own account of the case will be published soon.

Professional Courtesy.

One hears so much about the jealousy of physicians—of their mutual backbiting, quarreling, and generally splenetic state toward each other—that it is really somewhat refreshing to learn that we are not in reality a disunited body. Our esteemed contemporary, *The Journalist*, for example, has recently celebrated our united state in the following somewhat ferocious terms:

"There is not in this world to-day a more powerful, more monstrous, more unjust, and iniquitous organization in existence than that mysterious bond which fetters the medical profession as with links of steel, which is known as 'professional courtesy.' Professional courtesy is an excuse for neglect, for procrastination, for carelessness which is in too many cases tantamount to murder. It is no rash statement to assert that there are hundreds of cases known to physicians who are in other respects reputable men, where patients have died through the criminal neglect and stupidity of the attendant physician; yet you could not worm an admission of that sort out of them in a court of law—they are bound by 'professional courtesy' to allow their ignorant incapable fellow-practitioner to go on murdering without a word of remonstrance."

Thus it seems that physicians do stand by each other, after all. This is not very surprising when one considers the difficulties and limitations of our art. When an architect miscalculates in building a bridge, his incompetency can be demonstrated mathematically; but when a chronic invalid, with some obscure malady, receives a series of prescriptions, under which he or she gets no better, the incompetency of the physician is hard to prove. The malady itself may be impossible of recognition and of cure. Doctors know this. It compels them—if they have any sense of justice—to charity toward their fellows. We follow a difficult and laborious calling. There are black sheep everywhere, and sometimes, perhaps, "professional courtesy" has been made to shield them; but we do not think that harm often comes from its exercise, and, indeed, medicine could not be practiced without it.—*Medical Record*, July 21, 1888.

Detection of Traces of Bismuth.

At the meeting of the Paris Society of Pharmacy, July 14, 1888, M. Léger made a communication, illustrated with experiments, on a test for bismuth which he proposes. One of the most sensitive tests for alkaloids, he said, whether they are natural or artificial, is the double iodide of bismuth and potassium. The reaction, it is true, is quite general and reliable, but not very instructive, because it has never helped us so far to form more definite conceptions of the constitution of alkaloids. The idea came to M. Léger to reverse the test, and use an alkaloid to detect bismuth instead of bismuth to show up an alkaloid. He found the reagent very satisfactory in all respects, especially as regards sensitiveness. For obvious reasons, cinchonine was the alkaloid selected. A solution of potassium and cinchonine hydriodate added to a liquor containing 1 per 10,000 of bismuth gave immediately a bright red precipitate; with 1 in 100,000 of water a very appreciable tinge could be observed even from a distance. With 1 in 500,000, a faint hue can with some precautions be recognized. At the same time, care must be taken how the bismuth solution is made; there should be no alcohol, no alkalies, or excess of sulphuric acid. To extend further the usefulness of the test, he tried to use it for quantitative estimations of bismuth, but so far without success, owing to the uncertain composition and keeping-properties of the precipitate. Hence it can only be recommended as a qualitative test for bismuth, but an excellent one. In answer to a query by M. Petit, M. Léger added that mercury could not be mistaken for bismuth with the test in question. While bismuth affords a very bright red precipitate, mercury gives only a faint yellow one, and but little of it. —*Chemist and Druggist*, July 14, 1888.

Two Cases of Gouty Neuritis.

Mr. J. Gurney Carruthers reports two cases of gouty neuritis in the *Lancet*, June 30, 1888. In the first case, a man forty years old, a retired officer of good physique and temperate habits, given to work very hard at chess and music-composing, and not fond of athletic pursuits, was seized, on February 5, with general malaise, some conjunctivitis, intense supra-orbital pain, and intolerance of light. A mixture of iodide of potassium (half a drachm), tincture of colchicum, and bicarbonate of potash was given every four hours. He continued to get worse steadily. On February 7, atropine was applied to the eye, which was now intensely painful and suffused, the conjunctiva being greatly injected, the pupil contracted, and there being intense photophobia. The mixture of iodide of potash was continued. After the dilatation of the pupil, it was seen to be lozenge-shaped, the result of former attacks. Chloral was given at night, with partial success. A dull aching pain was continuous, varied by paroxysms of an acute character at two-hour intervals, and lasting from twenty to thirty minutes; this pain was often relieved by tapping the supra-orbital region lightly with the fingers. A liniment of aconite and chloroform was applied, with partial success, and was continued until February 10, when the upper and inner angle of the cornea showed symptoms of ulceration, which, however, resolved. An ophthalmic surgeon was called in, who recommended the treatment to be continued, and leeches to be applied to the temple, which caused great irritation; hot applications were also advised, with the same result. A blister had been applied to the nape of the neck, but without giving relief. On the 12th, the severe injection of conjunctiva and sclerotic was lessened, perhaps owing to the blister, which was acerrime. The paroxysms were not so frequent, although as severe. The patient was given green iodide of mercury (one-quarter of a grain), in addition to the half-drachm of iodide of potassium; also, a fairly good liquid diet, with two wineglassfuls of whiskey and alkaline water. The paroxysms still continuing, the patient, who is of a highly nervous organization, became rather exhausted; a grain of opium was given, although he declared opium disagreed with him. To counteract the depressing headache caused by the opium, a glass of champagne was given at 11 A M., and repeated at lunch, the allowance of whiskey still being taken. This state of things continued for four days; the exacerbations of pain became gradually less frequent, the conjunctival injection subsided, and the eye returned to its normal state. The pupil was somewhat lozenge-shaped and the sight defective. There was no photophobia. Tonics were then given. The duration of the case was twenty days. The iodide of potassium was increased to one drachm every four hours, without causing more than turgescence of the pharynx. There was no iodism.

In the second case, a man of intemperate habits had frequent attacks of neuritis, affecting the crural nerves. He used to have intense lightning pains, and severe spasm of the muscles, so acute that he would scream out. A grain of muriate of morphia used to be injected locally, then half a drachm of iodide of potassium given every four hours, until iodism was fully established, which was generally in twenty-four hours, when the pains subsided and the patient became better.

Many authorities, Mr. Carruthers remarks, condemn opium in all gouty conditions; but he sees no objection to it, provided suitable eliminative treatment is also employed. He uses it freely in cases of gout, both acute and chronic.

Why Albinos Do Not See Well.

In the *St. Louis Med. and Surg. Journal*, July, 1888, Dr. A. D. Williams says that the white flaxen hair of albinos shows that there is a deficiency of coloring material in their bodies. Further proof of this fact is found in the absence of the necessary amount of pigment in their eyes. Such persons have "pink" eyes because there is not pigment enough in the iris and upon its posterior surface to prevent the red reflex of the fundus from shining through the iris. Such persons are always greatly annoyed by strong light, because there is not sufficient color to prevent the ingress of a flood of it. It enters not only through the pupil, but through the substance of the iris as well. The choroid being likewise deficient in pigment, the excessive amount of light dazzles and greatly confuses vision. Furthermore, the deficiency of pigment in the choroid prevents the light, after it has properly acted on the retina, from being absorbed, that being the main function of the choroidal pigment. Albinism is an unfortunate condition, as there is no way to supply the deficient pigment to the iris and choroid. The annoyance is somewhat palliated by the use of properly colored glasses. These supply the place of the natural pigment to a slight extent.

Creoline as a Mouth-Wash and Gargle.

Schnitzler recommends (*Internat. klin. Rundschau*, No. 27) creoline in the obstinate form of follicular angina; he applies it with a brush or uses it in an atomizer. The taste is disagreeable. The following formulæ are given:

℞ Creoline . . . . . gr. xv–xxx
Aq. destil. . . . . Oi.
Aq. menth. pip. . . . . ℥iii
M. Sig. Use as a gargle.

℞ Creoline . . . . . gr. xv–lxxv
Aq. destil. . . . . f℥iss–iii
M. S. For local application with brush.

℞ Creoline . . . . . gr. iss–viiss
Acidi borici . . . . . ℥iiss
Ol. menth. pip. . . . . gtt. xx
M. Sig. For insufflation.

—*Deutsche med. Wochenschrift*, Aug. 16, 1888

Antiseptic Precautions in Internal Urethrotomy.

At the meeting of the Harveian Society of London, May 17, 1888, Mr. Bruce Clarke read a paper on the "Value of Antiseptic Precautions in Internal Urethrotomy." Attention was drawn to the fact that this operation had been advocated for many years in certain cases of stricture which do not yield readily to dilatation, yet its principles had never been generally accepted by surgeons. He thought this was due partly to the fact that its results were not supposed to be good, and partly to the dangers of the operation itself. As to its results, he said it was often urged that the worst strictures were always those in which urethrotomy had been performed. Of course this was perfectly true, but it would be fairer to state that it was only the worst strictures that were submitted to urethrotomy. If strictures were neglected after the operation, they, of course, recurred, and this gave a certain currency to the idea that it was the internal urethrotomy that had made them relapse. The dangers of the operation, he said, were dependent upon septic fever, and this depended upon either self-infection from a septic urethra or on dirty instruments. The latter source of infection could be easily guarded against by the thorough cleansing of instruments and catheters, whilst the purification of the urethra was no easy matter. To effect this, however, as far as possible, the urethra should be irrigated with sublimate (1 in 2000) for several days beforehand, and, upon the stricture having been divided, the bladder should be washed out with a similar solution, and then with hot water at a temperature of 105° F. Afterward, a catheter should be tied in for twenty-four hours. By this means the urine came very little into contact with the urethra, and septic infection was avoided. Fifteen cases were related in which the plan had been successfully tried by the author, and he alluded to some in which the plan had been suggested to other surgeons.

Mr. Swinford Edwards, in discussing Mr. Clarke's paper, said that in the last six internal urethrotomies which he had performed he had not only carried out the suggestions of Mr. Bruce Clarke, but had administered boracic acid before the operation, and for a few days after, with a view of sterilizing the urine, as suggested by Dr. Palmer. In none of these cases did urinary fever supervene; but, brilliant as was internal urethrotomy, he believed that the time was soon coming when it would be almost, if not entirely, supplanted by electrolysis for strictures in the deep or fixed urethra which were unfitted for the simple treatment by dilatation.—*Lancet*, July 14, 1888.

Arsenic in Textile Fabrics.

F. E. Matthews, an English chemist, writes to the London *Daily News* that, having traced several cases of arsenic-poisoning to cretonnes and like fabrics used as curtains, etc., he undertook an extended examination of these fabrics. Forty-four samples of cretonne have been analyzed by him, and of these none was found absolutely free from arsenic. Three contained only the faintest trace, 21 contained distinct traces, and, in the remaining samples, arsenic was present in poisonous quantities. In his analyses, he has grouped 11 of them as "very bad," and the other nine are bad and distinctly dangerous. One of the worst specimens has been examined quantitatively, and yielded an amount of arsenic equivalent to rather more than 19½ grains of arsenious oxide per square yard. It is quite a common occurrence to have enough of these fabrics in a room to contain, at this rate, sufficient arsenic to give 100 people a fatal dose. As far as the analyses have gone at present, they do not show that any one color is more poisonous than another, as, strange to say, the greens and blues, that would be first suspected, have until now proved purer than reds, browns, and blacks. In the case of imitation Indian muslin, only five samples have been analyzed, but they all contained arsenic in poisonous quantities.—*Druggists Circular*, July, 1888.

Creasote Capsules.

Creasote put up in gelatin capsules soon destroys the container, and for this reason only a few should be put up at a time. Groh, of Vienna, after a number of experiments, has found that, when the creasote is rubbed up with cacao powder, it will not only not attack either a gelatin container or a wafer, but is much better borne by the stomach. Capsules or wafers thus put up do not become soft, even after long standing, nor do they give forth that peculiar disagreeable odor of creasote, which is so offensive to some persons.—*National Druggist*, August 15, 1888.

Native Indian Obstetrics.

From a report of Dr. Keegan, Presidency Surgeon of Lahore, says the *Medical Press and Circular*, July 11, 1888, some estimate may be formed of the immense boon conferred upon the women of India by Lady Dufferin's movement to supply them with medical aid in child-birth. The method of conducting labors throughout Central India only a year or two ago was as follows: The native midwives, or *dhaies*, on being called to a woman in labor, hasten delivery as much as they possibly can by exerting pressure on the abdomen; they have no idea of waiting upon nature. The child being born, the mother is made to stand up, and pressure is again applied to the woman's abdomen, by means of the head or bent knee of the *dhaie*. A bandage is then passed round the woman's abdomen, and she is then allowed to lie down on a charpoy, under which a charcoal fire is placed, which causes the room to become excessively warm. The room selected for the confinement is usually in the very interior of the house, and may be described almost as an hermetically sealed chamber. The day succeeding the birth of the child, the mother is subject to fumigation, which is continued for about twelve days, and at the same time indigenous stimulating condiments are given, which are supposed to give milk in abundance. These condiments are used four or six weeks. The mother is allowed to drink nothing but warm water from the first ten days. In the hot season of the year, the charcoal fire is used both day and night for the first twelve days succeeding the birth of the child. Subsequently it is used from evening to early morning, and is not discontinued *in toto* until the expiration of a month or six weeks. During these six weeks, the child is subjected to the same atmospheric conditions as the mother, and, whenever it cries, more fuel is added to the fire, and the child soon ceases to cry, owing to the effects of the carbonic acid gas. Dr. Keegan adds that this method of conducting confinements is, with some slight modifications, more or less prevalent throughout the greater portion of India.

Good Advice.

The editor of the *Alienist and Neurologist* gives the following good advice: "Take care of your loved ones at home, brother doctor, and, as you love them, so will you feel your duty fairly to the world without. But you cannot give the outside world all, and give your family a part; and, if you give it all, the world's charity will not recompense your sacrifice by any exuberant providence for your uncared-for loved ones. This does not apply if you are an inveterate bachelor, a eunuch, or a monk; but it does apply with more force than our feeble words have expressed it, to many a faithful doctor whom we know, and to many more whom we knew in our youth, but who have long since gone to the reward of the faithful to duty, in heaven, who might have staid longer on the earth to brighten it, had they been just a little more selfish for themselves and their own, and a little less completely self-sacrificing to all the world but self and home."

Mechanism and Treatment of Pneumonia.

Dr. W. C. Van Bibber, in a paper on the mechanism and treatment of pneumonia, read before the American Medical Association, May 8, 1888 (*Journal Am. Med. Assoc.*, July 28, 1888), states his conclusions in the following propositions:

1. The mechanical interference to the circulation and aeration of the blood in the lungs is the main symptom to be combated in the treatment of pneumonia.

2. It requires prompt, urgent, and aggressive treatment in the earlier stages of the disease, and this mechanical relief can be afforded by decided local depletion.

3. Even after the effusion into the parenchyma has occurred, it requires still further local depletion to preserve the heart and keep open the circulation in the roots of the lungs.

4. Pneumonia admits of study by mechanical as well as vital principles, and its pathology may be elucidated and its treatment improved by study in these directions.

NEWS.

—London is to have an *Illustrated Medical News*.

—Yellow fever is said to have broken out among Jacksonville refugees at Hendersonville, N. C.

—Basket collections are to be taken up in some of the churches of Camden, N. J., in aid of the yellow fever sufferers.

—The health reports of New York City continue to show an unusual number of cases of diphtheria, scarlet fever, and measles.

—Professor Proctor, the well-known astronomer, died in New York City, September 12, of yellow fever, which he contracted while in Florida.

—In a "youngest grandparent" contest, Chapel Hill, North Carolina, leads with a negro woman who had a granddaughter, it is asserted, at the age of 28.

—The *Maryland Medical Journal*, September 15, 1888, states that the meeting of the Southern Surgical and Gynecological Association, which was announced for September 11, 12, and 13, was postponed on account of the quarantine laws.

—The *Boston Medical and Surgical Journal*, September 13, 1888, says that Dr. Samuel O. Vanderpoel, of New York, has been sued by a hotel proprietor of Rhode Island for making a diagnosis of scarlet fever in the case of a child sick at his hotel, by which the plaintiff's business was damaged. There were good grounds for the diagnosis.

—The *Lancet*, August 25, 1888, says: A French medical man recently prescribed one gramme of sulphate of atropine instead of a centigramme, the error resulting in the death of his unfortunate patient. The doctor and the chemist who dispensed the prescription have been found guilty of homicide through imprudence, and the former was condemned to pay 600 francs as compensation, and the latter to five day's imprisonment and the payment of 400 francs.

—Boston papers tell of "the singular death, at Danvers, of Miss Emma Felch. She was taken ill some months ago, and, from the fact that her mother died of cancer, she became possessed with the idea that her sickness was from the same cause. Her physicians could find no indication of cancer, but she asserted that she had one, and located it. She refused food, saying it distressed her. At her desire, after she died, an autopsy was held, and no cancer could be found. It was decided that her disease was purely sympathetic."

HUMOR.

Just What He Wanted.—Barber (desirous to please): "How would you like your hair cut, sir?" Customer (innocently): "First-rate. That's what I came in here for."—*Idea.*

Collector (on his tenth visit)—"Look a-here; how many more times do you want me to call with this little account?" Bill Overdue—"Why, man, I don't care if you never call again."

Smith: "What has become of Dr. Cure-all?" Jones: "The man who advertised to cure every complaint under the sun?" Smith: "Yes." Jones: "Oh, he died the other day from a complication of diseases."

"Stewardess, Stewardess!" screamed the old lady in a storm, "my room is flooded; do, please, ask the captain to rent me one of those water-tight compartments. I declare, this is perfectly dreadful."—*Ocean.*

A Farmer in Western New York declares that he saw a ghost eating green apples in his orchard the other night. Now, if a case of cholera in phantom in Western New York be heard of, we shall know what caused it.

A Wrong Diagnosis.—"You are evidently worried over business matters," diagnosed a young physician. "What you need is peace of mind." "My dear sir," replied the patient, "I get a piece of mind every day."—*Epoch.*

Had a Hard Night.—Caller—"Your little dog doesn't look very well this morning, Mrs. Hobson." Mrs. Hobson—"No, poor little fellow! The baby's crying kept him awake all night. He barked until nearly morning."

At the Police Court.—The judge questioning a witness: "Your name?" "Josephus Horther." "Your age?" "Forty-three." "Your profession?" "Dramatic author." "That is not a profession—it is a disease."—*Truth.*

OBITUARY.

JOHN WOOLVERTON, M.D.

Dr. John Woolverton, Ex-Mayor of Trenton, died September 14, 1888. He was born in Hunterdon County, October 27, 1825. He studied at Lafayette College, and was graduated in medicine from the University of Pennsylvania. He was prominent in politics and in the Masonic fraternity.

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COMMUNICATIONS.

NERVOUS APHONIA CURED BY THE LOCAL USE OF COCAINE.

BY J. E. SCHADLE, M.D.,
ST. PAUL, MINN.

Sometime during the month of August, 1886, Mary L., fifteen years old, in company with her father, presented herself at my office for advice regarding loss of voice, which had taken place three months previously.

Phonation, as well as whispering, was sometimes impossible. About two years before the present trouble came on she was afflicted in a similar way, the aphonia on this first occasion having lasted several months. During this attack, treatment, consisting of various neurotic remedies, prescribed with a view to re-establish the voice, had been tried by the family physician, but no perceptible benefit accrued from it, and the case was finally allowed to go on untreated for an indefinite time. One day, in the midst of a violent fit of laughing, audible tones were uttered by the patient, which were almost immediately followed by a full return of the voice.

Apart from occasional hoarseness and more or less huskiness, vocalization remained unimpaired until the seizure in which I was consulted began. As to the hoarseness, it was of long standing, and figured as an annoying symptom long before aphonia was manifest. It seemed, too, to be getting worse as the young woman grew older.

In her general appearance, she presented a well-developed organization. At the age of thirteen, menstruation began, the periods occurring at regular intervals, and without being attended by influences calculated to derange the function.

As far as specific or tuberculous constitutional diseases were concerned, the family history was characterized by the absence of them. It was apparent, however, that, from her mother, a nervous temperament had been inherited, for excitement of an emotional character usually tended toward superinducing hysterical phenomena in the mother. These nervous peculiarities were strongly marked in the daughter.

Aside from complaining of loss of voice, there were evident signs pointing conspicuously to the existence of catarrhal conditions of the nasal tissues, producing, as it appeared, a great deal of discomfort.

The morbid action was not confined only to the mucous membrane of these parts, but cough and a dry and irritable sensation in the pharynx and larynx distinctly showed that these organs were also implicated in the same pathological change.

Among other subjective symptoms, were a feeling of intra-nasal pressure, and lancinating pains over the bridge of the nose, which invariably became quite pronounced during the height of acute rhinitis, for which she had a peculiar susceptibility, the slightest exposure to either draughts of cold air or dampness usually occasioning it.

A muco-purulent discharge coming from both the anterior and the posterior nares formed a troublesome condition, of which much complaint was made.

The unpleasant disturbances induced by

these acrid secretions from the nasal chambers were characterized by unsightly excoriations of the margins of the nostrils and of the upper lip. The presence of the discharge posteriorly kept up a constant desire to "hawk and spit," accompanied by nausea and sometimes actual vomiting. There was, too, digestive derangement, which was indicated by a heavily coated tongue, flatulence, and acid eructations from the stomach.

Examination of the nasal fossæ by reflected light showed hypertrophy of the middle, and atrophic changes of the inferior, turbinated bones, the mucous membrane investing these and associated structures varying very much in its abnormal appearances. That covering the middle turbinated region was congested and thickened, whilst the membrane lining the inferior region was purple, smooth, and glazed, and seemed divested of its ciliated epithelium.

The larynx and vocal cords, upon a laryngoscopic examination, were found to be in a state of chronic congestion.

Besides the hyperæmic appearance of the vocal cords, attempted phonation, as seen by the mirror, failed totally in approximating them, thus showing the marked functional inactivity of the larynx.

The treatment, therefore, of this interesting case naturally resolved itself into the institution of remedies calculated to restore the voice as speedily as possible and to remove the catarrhal products of the nose and throat.

As cocaine comprised such a wide therapeutic range in controlling local affections of nervous origin, the idea occurred to me that it might serve a valuable purpose in effecting an immediate restoration of the voice. Consequently I made an application to the larynx with pledgets of cotton saturated in a four per cent. solution of the drug. After allowing sufficient time for local anæsthesia to take place, I asked her to say "Yes." She did so, audibly and distinctly. "No" and other monosyllabic words were spoken in rapid succession. Suffice it to say, that before leaving the operating chair, she was enabled to converse aloud without difficulty. The father who sat by observing the manipulations was amazed to see the phenomenal effect of the medicine, and he seemed overcome with gratitude for what was done for his child.

Two days afterward, a second visit was made and the voice was still good, the interval having been passed by occasional singing and considerable talking.

Treatment of the catarrhal symptoms improved the strength and purity of the voice.

Nowhere in the extensive literature of cocaine do I find this use of the alkaloid stated, and I believe I herewith record for the first time an observation in the local treatment of nervous aphonia which is invaluable and should be recognized by those who see these cases.

Galvanism we know has been our best remedy, but, when we take into consideration how tedious and troublesome its use becomes, especially when the applications are made directly to the laryngeal cavity, we should welcome with delight another local agent whose application is effected without any trouble whatsoever.

The *modus operandi* of the cocaine as it was used in this case, I presume, consisted in allaying peripheral nervous sensibility of the mucous membrane, and subduing thereby muscular irritability of the larynx. The larynx under these circumstances is placed, so to speak, in splints by the anæsthesia, thus overcoming active antagonism of the abductors and allowing the apparently paralyzed adductors to regain their natural tone and activity. The vocal cords can then be approximated and made tense, which is followed by voice production when phonation is attempted.

Under local treatment for a period of three months the pharyngo-nasal catarrh was cured.

The use of the electro-cautery reduced the redundant tissue of the middle turbinated bones, which was followed by a subsidence of intra-nasal pressure and the neuralgic pains that radiated from the bridge of the nose.

The atrophic changes of the inferior bone were arrested in their progress by a systematic employment of cleansing and stimulating agents. The post-nasal space, the pharynx, and the larynx were treated with local and constitutional alterative remedies, consisting principally of the iodine group.

This case illustrates conclusively, I believe, that, in one nervously predisposed, an exciting cause of aphonia may not unfrequently be found in a catarrhaly diseased state of the mucous membrane clothing the pharyngo-nasal cavities or the larynx. It, moreover, demonstrates the importance of properly and thoroughly interrogating these organs when such cases present themselves.

104 East Third Street.

SUPPURATIVE TONSILLITIS, WITH PASSAGE OF PUS INTO MEDIASTINUM AND PLEURA; DEATH.

BY JOHN J. REID, M.D.,
SURGEON TO CHARITY HOSPITAL, NEW YORK.

The interest of this case rested not so much on its rarity as on the difficulty of diagnosis. When he was admitted there were none of the common and significant signs usually found in quinsy, but there were evidences of cellulitis around the lower jaw and extending below the chin, not unlike what is noticed as a result of ulcerated teeth.

The history of the case was as follows: John Jenkins, German, 27 years old, entered hospital June 20, 1888. Note taken then states: Patient cannot speak sufficiently plain to give an intelligent history. By means of an interpreter it was inferred that a swelling of the neck and face was noticed a week before his admission to the ward. The swelling was on the left side, but rapidly spread to the right On admission, this was not noticed in any decided manner, but there was a swelling in the vicinity of the lower jaw which, in connection with the existence of ulcerated teeth, gave rise to the supposition that the diseased teeth were the cause of the cellulitis.

July 21, an incision was carried down alongside of the suspected tooth, but no result followed beyond free hemorrhage, which had to be controlled with pressure. Temperature, 104 1-7°; pulse, 120.

July 22. No improvement. The swelling is now most marked below the jaw, and an exploring needle was inserted, but without yielding any sign of pus. Has to be fed by the rectum, from inability to open the jaws.

June 23. The patient sank rapidly and died. Before death the tissues of the neck became emphysematous.

Autopsy.—An incision was made in the median line of the neck and extended laterally on each side from the chin. The sublingual and the other gland in the vicinity were purulent, and on passing backward abscesses were found in both tonsils, but more particularly in the left, which had broken down and permitted the pus to escape into the tissues of the neck, the pus following down the course of the deep fascia into the mediastinum. The pus was found in the left pleural cavity and over the pleura of the left lung.

RESULTS OF NEPHRO-LITHOTOMY AND NEPHRECTOMY.

BY CHARLES BAUM, M.D.,
PHILADELPHIA.

Nephro-lithotomy.

The first premeditated incision through the sound tissues into a kidney, for the removal of a contained calculus, was successfully performed by Henry Morris, of London, England, in 1880.

The operation was named nephro-lithotomy, and, under this term, he intended to designate the "cutting a stone out of a kidney, which, so far as can be ascertained by clinical examination, is not dilated or otherwise altered in form; and which, but for the presence of the stone, is presumably healthy."

From the time of Hippocrates downward, upon the appearance of external swelling or abscess in the loin, connected with renal suppuration and calculus, incision and an attempt to extract the stone were properly sanctioned. Surgeons, even from the earliest period, have been ready to follow and enlarge a sinus communicating with a renal calculus, and thus effect its removal; but to cut down upon an undilated kidney, early in the course of the disease and before any great disorganization has occurred, was hardly deemed feasible by men of great learning and experience. This Morris accomplished.

At the present time, most surgeons have extended the original definition of nephro-lithotomy so as to embrace cases in which there even may be some slight external fulness in the loin, yet not the pointing of an abscess, but in which the renal tissues have not ruptured.

Having recently conversed with an experienced general practitioner of medicine in regard to the operations of nephro-lithotomy and nephrectomy, it was a somewhat difficult task to convince him of the success attained. As memory is not able to retain accounts of various operations for any great length of time, a number of unselected cases have been arranged in chronological order in the appended tables, which, it is hoped, may supply the evidence demanded.

In the nephro-lithotomy table, no case has been cited in which a sinus led down to or penetrated the kidney, or in which the operator failed to detect a stone after reaching the gland. A considerable number of such exploratory operations have been performed, resulting frequently in complete relief of the symptoms, and rarely with fatal results.

Except where otherwise mentioned, all incisions were made in the loin.

Cases of Nephro-lithotomy.

No.	Reference.	Date of Operation.	Operator.	Sex and Age.	Description of Calculus.	Result		Remarks.
1	Tran. Clin. Soc. Lond., 1881, xiv, 30	Feb. 11, '80	Morris	F 20	Mulberry calculus; weight, 31 grains	R		Sinus remaining one year afterward.
2	Ibid., 1882, xv, 117	May 19, '81	Whipham and Haward	F 23	Phosphate of lime; weight, 47 grains	R		
3	Ibid., 103	Aug. 16, '81	Beck	M 19	Layers of uric acid and phosphates; weight, 29 grains	R		
4	Ibid., 113	Oct. 25, '81	Butlin	M 20	Oxalate lime; weight, 60 grains	R		Abdominal incision; antiseptics.
5	Ibid., 1883, xvi, 90	Oct. 20, '82	May	M 34	Mostly phosphate of lime; weight, 473 grains; 3 inches long	R		
6	Ibid., 93	Feb. 6, '83	Howse	M 57	Oxalate of lime; weight, 26 grains	R		
7	Brit. Med. Jr., Lond., 1883, i, 1004	March, '83	Hill	F	Calculus size of olive	R		
8	Ibid., 1069	'83	Jones	F 46	Weight, 105 grains		D	In 24 hours; suppression of urine.
9	Tran. Clin. Soc. Lond., xviii, 80	July 11, '83	Symonds	M 50	Weight, 18 grains	R		
10	Brit. Med. Jr., Lond., 1884, i, 1092	Sept. 10, '83	Anderson	M 20	Chiefly calcium oxalate; weight, 60 grs.	R		Slight carbolic toxæmia.
11	Med. Times and Gaz., 1885, ii, 10	Dec. 12, '83	Thornton	F 25	Chiefly uric acid; weight, 90 grains	R		Langenbüch's incision to examine both kidneys, and lumbar incision to extract calculus.
12	Tran. Clin Soc. Lond., vol. xviii, 189	May 8, '84	Dickinson and Rouse	M 19	Weight, 65 grains	R		On fourth day, calculus—weight, 2 grains—came away.
13	Ibid., 185	May 10, '84	Morris	M 24	Oxalate of lime and muriate of ammonia	R		
14	Austral. Med. Gaz., Sydney, 1884–5, iv, 68	June 7, '84	Mitchell	F 46	Six calculi removed, and two felt but not extracted		D	From exhaustion, on the 116th day; lung complication; also vomited blood.
15	Brit. Med. Jr., Lond., 1885, ii, 445	July 2, '84	Nicholson	F 42	Two calculi; weight, 6 grains, and 3 ounces, 14 grains; triple phosphates.	R		
16	Tran. N. Y. Med. As., 1884, i, 150	Aug. 11, '84	Seymour	M 52	Dried débris; weight, 38 grains	R		
17	Brit. Med. Jr., Lond., 1885, ii, 280	Oct. 15, '84	Chiene	M 29	Mulberry calculus; weight (dry), 48 grs.	R		
18	Westminster Hosp. Rept., 1885, i, 161	Dec. 3, '84	Macnamara and Donkin	F 34	Uric acid; weight, 165 grains	R		
19	Lancet, Lond., 1885, ii, 343	Dec. 17, '84	Whitehead	M 39	Friable stone, which broke	R		Pus and grit from wound after operation.
20	Tran. Path. Soc. Lond., 1884–5, xxxvi, 276	Jan. 2, '85	Cullingworth	F 30	Stone from right ureter; wt., 270 grs; 1¾ inches long, 1⅛ inches broad; 4⅛ x 3 1-16 inches in circumference.		D	From uræmia (?), in 80 hours; exploratory abdominal incision.
21	Med. News, Phila., 1885, xlvi, 569	Feb. 21, '85	Tiffany	M 26	Fragments; weight, 556 grains	R		
22	Lancet, Lond., 1885, i, 1081	Mar. 11, '85	Hill	F 40	Weight, 142 grains	R		
23	Med. Times and Gaz., 1885, ii, 10	Mar. 25, '85	Thornton	F 27	Found two calculi in right kidney, which were overlooked at first operation 2 years ago. (See No. 11.)	R		Langenbüch's incision to examine both kidneys, and lumbar incision to extract calculus.

24	St. Barthol. Hosp. Rept., xxi, 1885, 125	May	1, '85	Walsham	F	63	Uric acid encrusted with phosphates		D	On ninth day, with epithelioma of pelvis of kidney; lateral incision.
25	Brit. Med. Jr., Lond., 1885, ii, 701	May	15, '85	Owen	M	19	Weight, 48 grains	R		
26	Ibid., 1886, i, 19	May	23, '85	Wright	M	19	Size of horse-bean; probably uric acid	R		T-shaped lumbar incision.
27	Canada Lancet, 1885–'86, xviii, 32	May	23, '85	Tait	F	25	Large branching calculus	R		
28	Ibid.,	June	16, '85	Tait	F	52	Large calculus from pelvis of kidney	R		
29	Ibid., 33	July	13, '85	Tait	F	59	Large calculus from kidney pelvis	R		
30	Birmingham Med. Rev., 1886, xx, 270	Sept.	29, '85	Lloyd	M	21		R		
31	Med. News, Phila., 1886, xlviii, 69	Nov.	29, '85	Lange	M	30	Weight, six ounces	R		
32	Med. Press and Circ., Lon., 1886, n.s. xli, 168	Jan.	5, '86	Carter and Paul	F	22	Larger portion of uric acid; weight, 105 grains	R		From error in diagnosis, each ovary separately removed by other operator.
33	Brit. Med. Jr., Lond., 1886, i, 821	Jan.	21, '86	Brown	F	46	Seven calculi, uric acid, and phosphatic; weight, seven ounces		D	On 11th day, suddenly, of heart-clot; abdominal incision or "laparo-nephrotomy."
34	Ann. Surg., Chicago, 1887, v, i	May	6, '86	Franks	M	28	Carbonate and phosphate of lime; also, ammonio-magnesia phosphate	R		
35	Tran. Clin. Soc. Lond., vol. xx, iii	May	15, '86	Morris	M	42	Oxalate of lime; weight, 32½ grains	R		T-shaped lumbar incision.
36	Ibid., 124		'86	Gould	F	40	Urates; weight (dry), 49 grains	R		Calculous pyelitis and considerable pus.
37	Lancet, Lond., 1887, i, 408	Aug.	10, '86	Chavasse	M	27	Weight, 30 grains		D	In 16 hours, suddenly and quietly; stopped operation in half-hour from collapse. At autopsy, kidney totally disorganized, and about 50 small calculi in pouches; also larger one; weight, 38 grains, virtually obliterating ureter.
38	Med. Press, West. N. York, 1887, ii, 61	Aug.,	'86	Cheesman	F	35	Several calculi	R		
39	Birmingham Med. Rev., 1886, xx, 270	Sept.	8, '86	Lloyd	M	19		R		
40	Med. News, Phila., 1886, xlix, 677	Oct.	13, '86	Gross (S. W.)	M	33	Lime oxalate; weight, 58 grains	R		
41	Ibid., 1887, l, 458	Oct.	30, '86	Shepherd	M	26	Triple phosphates; weight, 4 ounces, 7 drachms; 3½ inches long, 9 inches in circumference		D	In 3½ months, from septicæmia, due to abscess in upper end of kidney; no pus at time of operation.
42	Lancet, Lond., 1888, i, 119	Dec.	1, '86	Hill	M	26	Uric acid	R		Fistula remained.
43	Ibid., 1888, ii, 16	Dec.,	'86	Pick	M	23	Uric acid; weight, 3 drachms		D	Pneumonia developed in few days; died of phthisis 16 months later; tubercle in lungs at autopsy.
44	Brit. Med. Jr., Lond., 1888, i, 795	Dec.	15, '86	Page	M	22	Two small calculi from left kidney	R		Lateral and median lithotomy previously done; later, right kidney exposed; abscess opened, but no stone.
45	Ibid., 1886, ii, 823		'86	Wright	F	28	Uric acid; weight, 48 grains	R		T-shaped lumbar incision.

Cases of Nephro-lithotomy—Continued.

No.	Reference.	Date of Operation.	Operator.	Sex and Age.	Description of Calculus.	Result.	Remarks.
46	Med. News, Phila., 1887, 1, 682 . . .	March 7, '87	Agnew (D. H.)	M 37	Chiefly phosphate lime and uric acid; weight, 275 grains	R	Incessant euresis, until carbolized antiseptic gauze removed from wound on third day.
47	Brit. Med. Jr., 1888, i, 685	April 5, '87	Franks	F 34	Large as pea	R	
48	Med. Chronic., Manchester, 1887, vi, 210	April 7, '87	Jones	M 17	Oxalate lime; weight, 207 grains . . .	R	
49	N. York Med. Jr., 1888, xlvii, 77 . . .	Aug. 27, '87	Lange	M 21	Two uric acid calculi	R	
50	Med. Record, N. York, 1888, xxxiii, 479 .	Jan. 9, '88	McCash . . .	F . . .	Mulberry calculus; weight, 120 grains	R	

Of the 50 cases, 28 were males (3 died), and 22 were females (5 died). Of the 50 cases, 42 recovered and 8 died, or 16 per cent. Of the 8 fatal cases, Nos. 14, 24, 41, and 43 could, with great propriety, be eliminated in computing the death-rate, thus reducing the mortality to 8 per cent.

Incisions.—Lumbar, ... 41 cases and 5 deaths (exclude Nos. 14, 41, and 43) or virtually 2 deaths.

Lumbar, enlarged by T, ...	3	"	"
Abdominal, ...	3	"	2 "
Combined abdominal and lumbar,	2	"	"
Lateral, ...	1	"	1 " (No. 24).
	50	"	8 "

In case No. 5, the pronounced symptoms had lasted only four weeks, and at the time of operation there was some fulness in the loin, while at the autopsy the kidney was found to be disorganized. To learn the condition of both kidneys, Mr. Thornton twice opened the abdomen of the same woman, by Langenbuch's incision, operating the second time after an interval of two years, and then immediately cut through the loin to extract the calculus, the patient recovering (Nos. 11 and 23). The sad mutilated condition of the woman (No. 32), when she presented herself to Carter and Paul, comes with a warning note to abdominal surgeons. She had submitted to the removal of normal ovaries at separate operations by other surgeons, with the hope of securing relief from pain, which, happily, was afforded by the removal of a calculus from her kidney. In a medico-legal and moral aspect, this case is almost unique. Incessant emesis followed the attempt to arrest hemorrhage by packing the kidney with antiseptic gauze moistened with a "weak solution of carbolic acid" (No. 47), and only ceased when the packing was removed on the third day. The condition was attributed to renal reflex.

Finally, nephro-lithotomy saves the sufferer having renal calculus from great and often long exhausting pain, from suppuration and consequent disorganization of the kidney, from the more serious operation of nephrectomy, and, in some cases, from direct death.

Nephrectomy.

Not more than a score of years ago, nephrectomy was considered an operation to be carefully shunned. As the result of errors of diagnosis, the operation had been performed a few times, always by abdominal section.

To Gustav Simon, of Heidelberg, belongs the honor of devising and successfully executing the first premeditated nephrectomy, and of introducing the method of operation through the loin.

Congenital absence of a kidney had been observed in the post-mortem room. Experiments on living animals had shown the ability of the system to accommodate itself to the loss of one kidney, and, upon killing the animals, the remaining kidney was found to have increased considerably in size. It became evident, therefore, that one kidney of normal structure could continue life in apparent health. In many cases demanding nephrectomy, the remaining healthy kidney undergoes by degrees a physiological

hypertrophy, in proportion to the disability of its fellow, so that, by the time the operation is performed, it is equal to the demands made upon it. The same ability has been observed after the removal of one gland, necessitated by a wound.

The following table of unselected cases of nephrectomy is arranged chronologically and does not include any case published by Dr. Robert P. Harris (*American Jour. Med. Sci.*, July, 1882), by Prof. S. W. Gross (*Ibid.*, July, 1885), by Dr. J. Homans (*Boston Med. and Surg. Jour.*, 1884, cx), or by me (*Phila. Med. Times*, Feb. 21, 1885).

Under the column of "form of incision," the lumbar operation is indicated by L, the median abdominal by A, and the lateral abdominal, or Langenbuch's incision, by A ("L").

Cases of Nephrectomy.

No.	Reference.	Date of Operation.	Operator.	Sex and Age.	Form of Incision.	Diseased Condition.	Result.	Cause of Death and Remarks.
1	Birmingham Med. Rev., 1886, xx, 270	Nov. 18, '84	Lloyd	M 27	L	Intermittent hydronephrosis	R	
2	Chicago Med. Jour. and Exam., 1885, li, 45	'84	Bogue	F 36	L	Sacculated pus-kidney	R	
3	Lancet, Lond., 1885, i, 1081	Jan. 29, '85	Colquhoun	M 44	L	Calculous pyelitis and pyonephrosis	R	
4	Ibid., 936	Feb. 7, '85	Croft		A	Round-celled sarcoma	R	Carbolic spray used.
5	St. Barthol. Hosp. Rept., 1885, xxi, 121	April 8, '85	Walsham	F 41	A ("L")	Cystic tumor and large calculus	R	Carbolized spray used.
6	Cor. Bl. f. Schw. Aerzt. Basel, 1885, xv, 343	April 11, '85	Kroenlein	F 58	L	Carcinoma	R	
7	Med. News, Phila., 1887, l, 116	April 23, '85	Agnew (D. H.)	M 32	L	Floating kidney: nephrorrhaphy, October 10, 1884	R	Strict antiseptics.
8	La France Med., 1885, 630	April 30, '85	Polaillon	F 27	L	Calculous and cystic kidney	R	
9	Canada Lancet, 1885-'86, xviii, 33	May 20, '85	Tait	F 22	A	Diagnosed ovarian or tubal disease: proved to be fatty, cirrhotic floating kidney; weight, 9 ounces	R	
10	Wien. med. Wchnsch., 1885, xxxv, 985; 1012.	May 21, '85	Billroth	F 42	L	Calculous pyelonephritis	D	Attributed to injury to blood-vessels and blood-poisoning (?).
11	Birmingham Med. Rev., 1886, xx, 270	May 30, '85	Lloyd	M 5	L	Intermittent hydronephrosis	R	
12	Canada Lancet, 1885-'86, xviii, 33	June 18, '85	Tait	F 45	A	Diagnosed cyst of mesentery: was hydronephrosis	R	
13	Centralb. f. Gynak. Leipz., 1886, xi, 1,	July 2, '85	Heilbrun	F 28	L	Uretrovaginal fistula	R	
14	Med. News, Phila., 1886, xlviii, 130	Aug. 1, '85	Briddon	F 36	A ("L")	Abscess and calculus, weight 125 grains	D	Collapse in 78 hours: lumbar incision first tried: autopsy showed chronic and acute disease of other kidney.
15	Ibid., 567	Sept. 15, '85	Park	M 23 mos.	A ("L")	Fibro-cystic kidney	R	
16	Ibid., 1885, xlvii, 525	Sept. 17, '85	Shepherd	F 24	L	Calculous pye itis	R	
17	Gaz. hebd. d. Sc. M., 1886, viii, 529	Sept. 23, '85	Dubrueil	F 12	L	Hydronephrosis	D	Suppression of urine.
18	Cong. Fr. de Chirg., 1886, ii, 135	Sept. 26, '85	Demons	M 49	L	Punctured wound and abscess	R	Hernia of lung resected September 8, 1885.
19	Austral. Med. Jr., 1885, n. s. vii, 486	Oct. 6, '85	Gardner	M 42	Combin'd A and L	Abscess	D	Third day, from suppression of urine.

Cases of Nephrectomy—Continued.

No.	Reference.	Date of Operation.	Operator.	Sex and Age.	Form of Incision.	Diseased Condition.	Result.	Cause of Death and Remarks.
20	Arch. f. Klin. Chir. Berl., 1886-'87, xxxiv, 423	Oct. 14, '85	Bergmann	M 39	L	Suppurating kidney	R	
21	Centralb. f. Gynak. Leipz., 1886, xi, 1	Oct. 31, '85	Heilbrun	F 25	L	Utero-uretral fistula	R	
22	Med. News, Phila., 1886, xlviii, 70	Nov. 29, '85	Lange	F 26	L	Cystic pyonephrosis	R	
23	Cong. Fr. de Chirg., 1886, ii, 135	'85	Demons	F 30	A	Sarcoma kidney: diagnosed ovarian disease	R	
24	Deutsch. med. Wchns., 1886, xii, 489	'85	Kümmel	F 52		Sarcoma	D	In seven weeks, from intercurrent pneumonia.
25	Deutsch. Ztsch. f. Chir. Leipz, 1885-'86, xxiii, 139		Orlowski	F 37	A ("L")	Malignant tumor	R	
26	Charité Ann., Berl., 1885-'86, xii, 630	Jan. '86	Gusserow	F 33	L	Uretral fistula	R	
27	Trans. N. Y. State Med. As., 1886, iii, 234	Feb. 1, '86	Ferguson	F 35			D	Third day, suppression of urine; uræmia; no autopsy.
28	Deutsch. med. Wchns., 1887, xiii, 873	March 3, '86	Alsberg	M 5	L	Malignant tumor	R	
29	Lancet, Lond, 1887, ii, 1065	March 8, '86	Hulke	F 50	A	Large myxoma enclosing left kidney	R	Recurred in one year, and died.
30	Cong. Fr. de Chirg., 1886, ii, 189	March 14, '86	Segond	F 47	L	Suppurating hydronephrosis	R	
31	Ibid., 178	March 16, '86	Boeckel	F 38	A	Hydatid cyst	R	
32	Rept. U. S. Marine Hosp., 1886	April 15, '86	Wasdin	M 35	L	Pyonephrosis; previous nephrotomy	R	
33	Brit. Med. Jr., Lond., 1886, ii, 823	April 16, '86	Cullingworth	F 43	A	Supposed ovarian cyst; left ovary and kidney cystic, and both removed	R	
34	Cong. Fr. de Chirg., 1886, ii, 172	June 11, '86	Doyer	F 27	L	Hydronephrosis	R	
35	Birmingham Med. Rev., 1886, xx	June 16, '86	Lloyd	M 11	L	Congenital hydronephrosis	D	Fourth day, somewhat suddenly.
36	Cong. Fr. de Chirg., 1886, ii, 189	Aug. 5, '86	Segond	F 36	A ("L")	Floating kidney	R	
37	Rev. Med., Louvain, 1886, v, 5	Aug. 22, '86	Daudois	M 2 1-12	A ("L")	Medullary sarcoma	R	
38	Glasgow Med. Jr, n. s. xxvii, 326	Aug. 27, '86	Clark	F 26	L	Scrofulous kidney	R	Nephrotomy done seven months previously.
39	Brit. Med Jr., Lond., 1888, i, 73	Sept. 5, '86	Fell	F 31	L	Cystic kidney	R	Spray and full antiseptics.
40	Cong. Fr. de Chirg., 1886, ii, 172	Sept. 27, '86	Doyer	F 45	L	Calculus and cystic kidney	D	Persisting chronic septicæmia
41	Med. News, Phila., 1886, xlix, 695	Oct. 19, '86	Lange	M 33	L	Pyonephrosis	R	
42	Ibid., 1887, l, 116, and author	Nov. 20, '86	Agnew (D. H.)	F 60	A	Sarcoma	D	In 17 days, and cause obscure; no autopsy; spray used.
43	Gaz. Med. de Nantes, 1885-'86, iv, 123	'86	Malherbe	F 28	L	Pyelonephritis	R	
44	Cong Fr. de Chirg, 1886, ii, 132		Championniere			Pyelonephritis	R	
45	Ibid., 132		Championniere			Suppurating nephritis: in extremis	D	Shock.
46	Ibid., 132		Championniere		A	Hydronephritis	D	Uræmia.
47	Ibid., 133		Bouilly			Floating kidney	R	
48	Ibid., 133		Bouilly			Floating kidney	R	

49	Trans. Clin. Soc. Lond., vol. xx, 115		'86	Marsh	F	25	A	Atrophied kidney	R	.	Mid-axillary incision, and kidney not found; then median abdominal incision.
50	Annals Surgery, 1887	Jan. 20,	'87	Weir	M	35	A ("L")	Adenoma; weight, 21 ounces	R	.	Exploratory nephrotomy, Dec. 11, 1886; recurred (N. Y. Med. Jr, 1887, xlv, 554).
51	Jr. Am Med. As, 1887, ix, 651	Feb. 22,	'87	Dunning	F	46	L	Movable kidney; previous nephrorrhaphy, Oct. 30, '84	R	.	Incision enlarged by T.
52	Lancet, Lond., 1887, i, 66	April 19,	'87	Elder	F	23	L	Hydronephrosis	R		
53	N. York Med. Jr., 1887, xlv, 495	May,	'87	Wyeth	F	38	L	Cancer		D	Shock, in 15 hours; no autopsy.
54	Brit. Med. Jr., Lond., 1888, i, 242	Sept. 27,	'87	Hunter	M	24	A ("L")	Hydronephrosis; incision enlarged by T	.	D	Pneumonia followed, then abscess in loin, and, being incised, peritonitis set in, causing death in 3 months and 3 days.
55	Albany Med. Ann., 1888, vol. ix, 4	Oct. 3,	'87	Vanderveer	F	20	A	Renal cyst, diagnosed ovarian; tapped five times	R		
56	Peoria Med. Month., Jan., 1888, 305	Oct.	'87	Parkes	F		L	Abscesses; incision enlarged by T	.	D	In 16 days, from suppression of urine and cerebral symptoms.
57	Lancet, Lond., 1888, i, 119	Oct. 26,	'87	Hill	M	27	L	Sacculated calculous pyonephritis	R	.	Nephrolithotomy, Dec. 1, 1886; June 8, 1887. 11 calculi removed from sinus.
58	Ibid., 1887, ii, 409		'87	Chavasse	M	32	L	Enlarged kidney from calculus	.	D	Septic poisoning.
59	Med. and Surg. Reptr., Phila., 1888, lviii, 271		'87	Price (M.)	F	14	A	Hemorrhage from shot wound of kidney, also liver; peritonitis already developed	R		
60	Proc. Royl M. and Chir. Soc., 1885-7, n. s., 305		'87	Haward	F	16	A ("L")	Tubercular movable kidney	.	D	Vomited blood on second day; death in 48 hours; autopsy showed other organs to be healthy.
61	Phila. Co. Med. Soc., 1887		'87	Deaver (J. B.)	F	35	L	Pyonephrosis; kidney entirely disorganized		D	Sixth day, from septic peritonitis.
62	Boston Med. and Surg. Jr, 1888, cxviii, 453	April 4,	'88	Homans	F	24	L	Chronic abscess; nephrotomy one month previously		D	In ten days, from exhaustion.
63	Med. and Surg. Reptr., Phila., '88, June 16, 772	April 13,	'88	Deaver (J. B.)	F	42	A ("L")	Carcinoma		D	In 24 hours, from shock.

SUMMARY of 63 cases, 44 recovered and 19 died, or 30.16 per cent. Of 57 cases, in which the sex was mentioned, 17 were males and 40 females. Of 57 cases, in which the form of incision was stated, there were 34 lumbar operations; 25 recovered and 9 died, or 26.47 per cent. Among the lumbar operations, 2 were modified by enlarging the wound by T incision, with 1 death; twenty were by abdominal section, 16 recovered and 4 died, or 20 per cent. Among the abdominal sections, 11 were performed in the median line, with 2 deaths; 8 by Langenbüch's incision, with 2 deaths; and 1 by T enlargement of median incision, which recovered In addition, there were 3 cases in which the abdomen was opened to learn the condition of both kidneys, and immediately the lumbar operation done to extract the faulty kidney; all died.

When we reflect upon the severity of the operation of nephrectomy and the greatly exhausted condition to which many patients had been reduced before seeking relief thereby, and the fact that almost all the cases tended to a more or less early death, the operation fully commends itself to all, because thereby the degree of human suffering has been lessened and life with comfort extended. As in the history of ovariotomy, by an earlier resort to the operation and with greater skill and more perfected methods of operating, the mortality, no doubt, will be markedly reduced.

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THE PREVENTION OF CONCEPTION.

BY W. R. D. BLACKWOOD, M.D.,
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The editorial under this heading in the REPORTER for the 15th inst. has drawn attention to a matter of vast importance to the profession and general public alike. The subject of the regulation or control of conception in the human female has been almost tabooed by physicians partly from indifference, but largely from absolute cowardice in those capable of writing intelligently about it. Although I have read a good deal on the subject in medical and secular journals, the writers were always on one side—they decried the effort to prevent conception. Most authors based their beliefs (for they did not really argue the point) on the religious or moral aspect of this subject, laying special stress on the latter point, and I hold that it is largely because they were afraid of public opinion that they took this ground. All physicians know something of the prevalence of criminal abortion in any community, but particularly in large cities. Every practitioner of extended experience is aware of the ruined physical health of many women because of their practicing criminal feticide, and gynecologists reap their greater harvest from the uterine maladies engendered by instrumental abortions and the results of frequently repeated confinements at close intervals, with the inevitable accidents and concomitant injuries to the uterus under such conditions. How then can we be indifferent to all the suffering thus endured, and how can we evade our plain duty in the problem of preventing, so far as we properly may, the actual distress borne by innocent yet patient and confiding women, together with the inevitable misery and pauperism consequent upon the hordes of children thrown upon the cold charity of the world, when their parents either cannot or will not provide for them? It is all well enough to talk of the enormous death-rate which keeps the population in check so far as its too extended increase is concerned, but the plain answer to this quibble is that the mortality is decreasing perceptibly, I think partly through the restriction of conception, and much of the mortality, especially amongst infants, is due to the fact of their wretched surroundings, to say nothing about their want of stamina from defective intra-uterine development, owing to the poverty of their parents, whose social and pecuniary condition proclaims them as unfit progenitors of healthy offspring. These children should never have been born.

I don't wish to be misunderstood—no one has a more decided belief of the criminality of feticide than myself. I hold an abortionist to be a murderer not alone of the body, but it may be the destroyer of a soul in addition, the child dying before its birth, and I hold him or her equally culpable before the law of God or man, no matter how early he or she interferes to interrupt or to terminate gestation *after conception has occurred*—no matter what the plea may be on the part of the mother or the father of the unborn child, provided the conception is a normal one. So decided are my views as to this matter that I have always refused to perform craniotomy on my own account or to assist in doing so in the practice of others. Fortunately during my obstetrical career, which is now virtually finished (my practice in electrotherapeutics taking up most of my time), I had occasion only once to operate in a presumedly proper case, and despite my associates' protests I did abdominal section and saved both lives. One exception I recognize to this rule, and one only—that of extra-uterine pregnancy when diagnosed so far as may be prior to six weeks, and before rupture of the tube or sac has happened—then I believe and strongly urge electrolysis as the proper method of saving the mother from almost certain death, in the event of which of course the embryo is also lost. As to whether the fœtus should be removed after development of the placenta by laparotomy or be left to nature, I say nothing; others better able to decide than myself will no doubt settle the matter satisfactorily before long.

With a full sense of the importance in all its bearings what I now say, and recog-

nizing clearly just how prompt many physicians will be to condemn me for my opinion (to say nothing about the anathemas of the church in its every faction) I state my belief honestly and fearlessly, that under proper conditions the PREVENTION of conception is not only proper *per se*, but that *it is imperatively demanded under certain circumstances*. Where is the justice of condemning children to inherited syphilis, scrofula, or tuberculosis? Do we know for a certainty that the progeny of the husband or wife afflicted with these or other transmissible maladies will be healthy offspring, their parents being sufferers from them undeniably through inheritance themselves? What right has an epileptic to bequeath his disease to an innocent child, or why should hypocritical sanctimoniousness encourage the multiplication of imbeciles through the mating of men and women who are more or less mentally weak or absolutely insane? It will be said, of course, that continence should govern such people, for marry they will; that the object of the holy state of matrimony is not the gratification of sensual appetites; that the whole outcome and possibilities of conjugal love are in the hands of a higher power than ours; that interference with nature's processes is morally and physically wrong—all of which I unhesitatingly deny as arrant nonsense on a par with the assumption that the marriage bed becomes a brothel when any attempt at prevention or ordinary cleanliness is observed. Ablution does not constitute a brothel, nor is a married woman a prostitute because she practices it. The oft-quoted story also of Onan has, to my mind, no bearing on the question, even were it literally true, which would be hard to prove, except to those who believe all Scripture as meaning precisely what it says, no matter how self-contradictory the narration may be. Turning to the purely medical aspect of the problem, I never saw a more ludicrous display of double cunning than appeared in a medical journal, wherein a professor of gynæcology warned his class against the wickedness and baneful effect of simple aqueous or medicated vaginal douches when employed as a preventive measure after coition, when in the same journal farther on this man begged his pupils not to forget his repeated injunction as to the value of just such injections in large quantity under all conditions of uterine excitement, engorgement, or inflammation. One talk was for the religious public, the other a genuine piece of advice to his students, and a good one as we all know. The carnal demands of man throw aside all recognition of such regulations, and for one husband, who out of regard for the feeling and welfare of his wife abstains from sexual intercourse when it is desirable or absolutely necessary to do so, a million will insist on their "rights" and leave their spouse to endure the consequences.

More than one nation has from time immemorial destroyed the puny and deformed at their birth, so that their people might be strong and brave. This summary method to some extent served its purpose so far as the children were concerned, but it did not save the mothers from the untold suffering dependent upon the absence of intelligent medical advice, in spite of the assumption that savages do not suffer in parturition. To be sure the comfort or happiness of the women in these tribes was not counted, for they were mere chattels or conveniences amongst barbarians. How much better off are many of our civilized communities to-day in this respect? They are not as well off, for, because infanticide is a crime and is not practiced, the maimed, the halt, and the blind are compelled to struggle through life so long as it lasts, and our asylums, almshouses, jails, rookeries, and palaces bear irrefutable testimony that something is wrong, despite the progress of civilization, and the sermons of those who assume to be leaders in medicine or religion. Only last week an estimable lady told me that believing that she would die in the event of having to endure another pregnancy and confinement, her husband was compelled to abstain from sexual intercourse with her, and this because she firmly assured him that she would commit suicide before again undergoing what I am sure was almost martyrdom. Now this man is by nature unable to control his animal passion, and that he gratifies it away from his home is known to his wife. Is it a sin to control conception here (for the woman admits that she is not at all cold or apathetic conjugally) It will not do to say that a man *can* control his sexual appetite, and that he *must* do it. Some men cannot, and many who are supposed to do so are simply apt in concealing their indulgence from public gaze. I could multiply examples of this nature, and so can any physician who has enjoyed the confidence of as many families as I have done for more than a quarter of a century. Shut your eyes as you may, every observant person of intelligence knows my statement to be true.

The reports of lunatic asylums show that unbridled sexual indulgence is a factor in producing mental disorders, and it is equally certain that undue restraint of a natural and necessary exercise of the sexual instinct is likewise a prominent cause of insanity. If prostitution—a gigantic evil—is ever to be eradicated, it can only be done by encouraging judicious marriage relations; and as law and custom have recognized or prescribed monogamy as the proper form of married life with us; and as it is a fact that the male is ever ready and generally solicitous for intercourse during his prime, whilst the female is only so at periodical intervals when at all, at which time she is more exposed to conception than in the interim, it is evident that unrestrained indulgence must lead to rapidly recurring pregnancies in women during the child-bearing period provided they are not sterile. This being so the question is reduced to this—Is it proper, is it humane, is it desirable that the lot of a married female should be a continual round of impregnation, delivery, and lactation? Would such conduce to the happiness of the home; to the welfare of the family; to the sturdiness of the progeny thus generated? I do not hesitate for an instant to say NO! and I look with more than suspicion on the fulminations of those who, assuming superior virtue, condemn any and all attempts to control conception—I don't believe what they say! The land is full of wretched, broken-down women to-day whose lives have been wrecked because they have become mere machines for the reproduction of the race, and if the race is degenerating as many think it is, it is worth careful consideration whether or not something in the way of controlling the quantity would not enhance the quality of the product. Volumes of sounding words might be written on this theme, but in what I have said in this paper my object has been to take the matter plainly in hand, and give a straightforward statement of what I believe to be right and proper in considering a momentous question. To me the matter reduces itself to a choice between fœticide and prevention. The one is an indefensible crime—the other a necessity.

246 North Twentieth Street.

—One hundred and sixty-three new cases of yellow fever and six deaths were reported in Jacksonville September 22. Of the new cases, 103 were among the colored population.

THE PSYCHOLOGICAL INFLUENCE OF ERRORS OF REFRACTION AND OF THEIR CORRECTION.

BY GEORGE M. GOULD, M.D.,
PHILADELPHIA.

The fact indicated by the title above is one that I have repeatedly observed, and yet I have never so much as seen it alluded to in the most distant way by ophthalmic surgeons. It is now a matter of common knowledge that the pathological relations of the eye and the rest of the system are of the most intimate nature; that refractive errors or muscular insufficiencies are the great prolific sources of headache, and that gastric troubles, and numerous forms of reflex neuroses, even chorea and more profound derangements of the nervous system, may ultimately be due to eye-strain. But no one seems to have thought what a tremendous influence upon character and life may be exerted by an uncorrected eye-strain. The microscopic size of the defect has served to keep it ignored, and its influence also minimized by the general ignorance of the extent and exceeding intimacy of relation of the organ of sight and the organ of mind. Indeed, so thorough-going and wide-spread and causal are these relations that the reach of all the other senses combined is but a fraction of that of vision in the creation of intellect. In the light of evolution and psychology, reason and mind may almost be said to be products of the visual mechanism. Language itself, the *sine qua non* of intellect and civilization, is but the record of things seen; the letters of the alphabet are each and all but conventionalized pictographs, and mental pictures, or signs of pictures, are the counters used by the mind in all the processes of logic or thought. The ocular mechanism is like a bank at which mental counters and notes are tested and cashed with the coin of reality and truth. What more natural, therefore, than that a disorganized and faulty bank should disarrange the processes dependent upon it. If a false image, or one that is distorted, or one that is only reached by an exhausting expenditure of energy is the model of comparison, the action of the mind is disturbed, heredity is at war with reality, and the mental mechanism undergoes a subtile but profound change. It is, of course, in the young that this unfortunate process goes on at the most rapid rate, but is all the less noticed by parent or teacher. The most frequent method in which an

uncorrected eye-strain acts disastrously upon the developing mind is in making study and literary labor so irksome that the mind is slowly but irrevocably turned from intellectual pursuits and directed to physical activities for an outlet of its energy. This, in the formative period of the child and youth, is of the most absolute and tragical importance.

A year ago a boy of nine years was brought to me for examination of the eyes. He was a child of large brain, active mind, and fine character, whose parents were educated, intellectual people. But *this boy had never learned his letters.* It had been utterly impossible for him to exercise his accommodation long enough upon a printed page to learn the alphabet. I corrected his hyperopic astigmatism, and within the past year he has more than made up for lost time; in reading, arithmetic, writing, and such studies being well ahead of children of his age. The gist of the matter consists in the question, What would have been the result if this boy's parents had not been keen-witted enough to suspect ocular trouble? Plainly, the boy would have grown up with the poorest interest in intellectual pursuits, and more and more unconsciously driven to physical ones; a professional life would not have been chosen, and the position for which, by all the laws of heredity and endowment, he was fitted to take in life would, if thought of at all, have been only as a matter of regretful wonder on the part of parent or friend that it had not been adopted. I have had many similar examples in my practice. For instance, a woman, 22 years old, came to me suspecting that her daily headaches, persisting for many years, might be connected with eye troubles. It was, indeed, so. Her headaches disappeared, and other nervous derangements and choreic affections, and her general deterioration of health was changed as if by magic from the day her hyperopic astigmatism and insufficiency were relieved. But I also was interested to learn that in the past ten years one by one the intellectual and æsthetic occupations she had heroically undertaken had been laid aside, and everything dependent upon near vision, such as study, languages, painting, needlework, music, etc., etc., had been found so tiresome that her life had been wrenched from its natural order, and her whole mind had been regretfully turned to other exercises and uses.

Still another somewhat pathetic case came to me last week. Parents and teachers had for years stupidly scolded and punished a bright little girl ten years old, because of her inattention to studies and because of her petulance, nervousness, and insubordination. In fact, the child was quite choreic, and the pinched eyes and bent head told of eye-strain at once. Both eyes were astigmatic to the fearful degree of 5.50 D.—the highest astigmatic error I ever have met with. Who can doubt that her spectacles will have the most happy effect in changing the child's disposition, character, and the trend of her whole life, not only physically but in a psychological sense? There can be no doubt that this subtle and far-reaching cause—eye-strain—is at work everywhere to balk and blight. How many vocations and careers—intellectual, professional, or æsthetic—have been left unfilled, the natural aptitudes of character and endowment failing to reach their predestined fruition, because this subtle but effective enemy rendered it impossible? It is easy to pooh-pooh, and to talk glibly about the ridiculous conceits and exaggerations of the medical specialist. The pique of a dogmatist or hobby of a narrow-minded specialist is as nothing to the duty to truth and to humanity. The question remains, Is it so or not so? If my contention is true to the extent of the one-hundredth part of what I believe, it is a matter of the most profound significance for every parent, guardian, or general physician. Exactly their particular child or patient or friend may be undergoing an experience that is moulding the whole course of its future life, character, and influence upon the world. Liebreich contends that Turner's vision of the world and his pictures, and hence his æsthetic influence, was distorted by his astigmatism, and that if you wish to see a picture of his as it should have been painted, you must look at it through the cylindrical lens Turner should have worn to correct his astigmatism. If this be so, how sad it is to think Turner had not had such a lens! But however this may be, we cannot doubt that many a promising life has been switched, permanently crippled, into the side-tracks or lumber-yards of mercantile or humdrum life, that might have swept across continents, bearing its messages of intellectual honor and humanitarian service to all.

I cannot avoid the conclusion, let who will indulge his sneer and slur at "the weak vagaries of the specialist," that all young people who show any disinclination to literary work, or in whom such work produces any headache, ocular pains, or weariness and dimness—all such should at once

be sent to a competent oculist for examination as to the existence of refraction-errors or muscular insufficiencies.

119 S. Seventeenth St., Philadelphia.

ŒSOPHAGEAL STRICTURE.[1]

E. T. PAINTER, M.D.,
PITTSBURGH, PA.

The patient, aged about thirty-eight, complained of difficulty in swallowing food and its regurgitation, both liquid and solid, and of inability to drink cold water or other cool drink. It was first noticed that food would not move on in response to the usual movements of deglutition, and that its onward progress was assisted by a few gentle raps on the back. This symptom first showed itself about six years ago. From this slight difficulty in the passage of solid food to the stomach, the patient gradually found herself compelled to subsist wholly on liquid foods, and these could be retained only when taken at a certain warm temperature. Neither water at ordinary temperature, nor cool drink of any sort, nor solid food, had entered the stomach in a period of years. She was emaciated and destitute of physical vigor.

An examination of the œsophagus with a bougie proved the existence of a band, which would resist the further progress of the instrument till the constriction *willed* to give way, when the bougie would easily slip into the stomach. Neither had the diameter of the bougie, nor the flexibility of a tube, nor force, seemed to have anything to do with passing through the constricting ring. Passage beyond the constriction could be made only when the ring was so disposed and inclined. There had been no pain or hemorrhage. There was no history of the introduction of a foreign body and its impaction, or of the swallowing of a strong acid or strong alkali. No aneurism was evident. There is no history of carcinoma. The constriction was sixteen inches from the lower incisors. Dysphagia and regurgitation, which prevented the patient retaining sufficient nourishing food, were the only symptoms given.

As drugs, massage, the passage of a flexible tube, and the Faradic current had failed to accomplish any good results, I resolved to give a thorough trial to the galvanic current locally applied, and that experiment I proceeded to make. I employed from six to ten cells of a galvanic chloride of silver battery, placing a sponge electrode joined to the negative pole in one hand, and an œsophageal electrode connected with the positive pole within the constricting ring. This electrode consisted of an ovoid shell, seven-sixteenths of an inch by three-fourths of an inch of perforated hard rubber, which could be unscrewed in the middle, and had sufficient space within for absorbent cotton, which came in contact with a small expanse of platinum, and that in turn was united by an insulated wire to the battery.

The battery used gives a current absolutely constant in character; and a water rheostat served to differentiate the strength of the current. My applications were made three times a week for a few weeks, then twice a week, each treatment lasting from six to twelve minutes.

At the termination of the first treatment the following occurrence took place. The current had passed for as long as I thought best, when, on attempting to withdraw the œsophageal electrode, it came easily, in response to my traction, for a few inches, when it was seized by a contraction of the œsophagus and there firmly held for a few seconds. This peculiar accident did not happen a second time. After each treatment the patient placed herself in a recumbent position for a half-hour. At the fourteenth visit the electrode was passed through and beyond the point of stricture without the knowledge of the patient, nor did I feel any sensation of opposition. At dinner, after the fifteenth application, the patient ate meat and bread and butter.

In about three months I made twenty-five applications, obtaining most decided improvement. The contracting ring persists, but its irritability has disappeared. The patient eats, without regurgitation, of what others at the table partake, restricting herself in only one item of food—meat, which is cut fine for her. She drinks water and milk freely. For a time the stomach, unaccustomed to such foreign substances as bread and butter, strawberries, cheese, etc., made the patient aware of its change in function by dyspeptic disturbances.

The interesting points in this case are these: The ease with which a diagnosis of dyspepsia could have been made, its long existence, its obstinacy under manifold treatment, the continued presence of the stricture without its irritability, and the rapid change in character of the constriction under the influence of the galvanic current.

[1] A paper read at the meeting of the Allegheny County Medical Society, August 21, 1888.

FRACTURED PATELLA TREATED BY WIRING.[1]

BY J. J. BUCHANAN, M.D.,
PITTSBURGH, PA.

The patient is a German laborer, and his fracture was the result of direct violence, caused by the stroke of a three-hundred pound box which fell against his knee. He stated that the accident happened in the middle of the day of June 30. He continued to do his laboring work till evening, but on the following day found that he was unable to stand on the limb. I suppose that the blow broke the bone, but the capsule held together till evening. When he was brought to the hospital, five days afterward, the joint was considerably distended and the fracture easily recognized, but the lower fragment seemed to be very small. He was informed of the probable result by the use of external appliances, and the advantages as well as the risks attending the method by suture. With a full understanding of the circumstances he demanded the treatment which would give him the most useful limb, even though at some slight risk to his life. I accordingly operated on the eleventh day after the injury.

The most scrupulous precautions against sepsis were taken. Instruments and appliances were put through the same course of preparation as for laparotomy. Continuous irrigation with 1-2500 sublimate solution was employed, and the transverse incision was made to the full extent of the rent in the capsule. The lower fragment was not larger than a chestnut. The capsule was much lacerated, and a number of narrow shreds hung into the joint; the joint contained a great deal of clotted blood and bloody fluid. The joint was thoroughly washed out and all loose pieces and ragged ends and edges of capsule were cut away with scissors. The fractured surfaces were refreshed by the vigorous use of a curette. A single hole was drilled through each fragment, the drill entering about three-eighths of an inch from the line of fracture, and emerging at the cartilaginous border of the fractured surface. As a motive power for the drill, I used the dental engine, which was kindly supplied and manipulated for me by Dr. Charles Phillips, a dentist of this city. A silver wire of No. 24 gauge was passed. An incision was made into the lower part of the joint on the outside of the limb and a rubber drain inserted, the inner extremity barely entering the joint. The silver wire was then twisted firmly, which brought the fragments into place, and the ends of the wire were turned down between the edges of the apposed fragments. The capsule was closely united over the whole length of the rupture with the continuous catgut suture.

Interrupted silkworm-gut stitches were used for the soft parts down to the capsule. Sublimated dressings and a posterior splint completed the work. At the expiration of the third day the drain was exposed and withdrawn. The primary dressing was removed at the end of a week, when the wound of the soft parts was found to be soundly healed and the skin stitches were all taken out. The progress of the case was aseptic and of course absolutely devoid of pain and discomfort. At the end of four weeks the patient was allowed out of bed, and at the end of five and a half weeks all dressings were removed and he was allowed to walk upon the limb with the aid of crutches. At the end of six and a half weeks he was permitted to rely on a cane without any support to the limb. When I last examined him four or five days ago, palpation of the patella gave no evidence of its ever having been fractured. The range of motion is not yet great, but is rapidly increasing and will, I doubt not, be completely restored.

There is no question that the treatment of fractured patella by external retentive apparatus is extremely unsatisfactory. An occasional case of close ligamentous union encourages the surgeon, but the great majority of cases have a half-inch or more of separation which gradually increases; a large proportion have refracture or rupture of the ligament and almost all have limbs of greatly impaired usefulness.

On the contrary wiring, when it succeeds, as it usually does, is said to leave the patient with bony union and with a freely movable joint. It certainly is the most speedy and least troublesome of all methods of treatment. I myself think it is destined to be the treatment of the future. As our methods of securing asepsis of operative wounds become more certain and our skill in applying them increases, so will the patella suture become better established. In the present condition of the science the mortality of this operation is slight, but it still exists. I think it will be reduced practically to zero. As things now are I think the advisability of the operation in any particular case should

[1] A paper read at the meeting of the Allegheny County Medical Society, August 21, 1888.

depend upon the wishes of the patient and the skill of the operator in securing asepsis. If the patient is unwilling or his attendant lacks the technical skill for rigid antisepsis the operation should not be thought of. On these points I can do no better than to quote the words of Dr. Frank W. Rockwell, of Brooklyn: "Finally, I believe that as long as this form of fracture is treated by the ordinary methods employed, just so long will the present unsatisfactory results continue to obtain; and I believe it to be the duty of the surgeon, in any given case, at least to give his patient the benefit of deciding for himself whether he will have wiring done or not, and in event of his selecting the operation, to do it at the earliest proper time, if capable of performing a thoroughly aseptic operation, since I believe that by so doing he will obtain the best results in the largest number of cases"

To the same effect has Dr. Lewis S. Pilcher, also of Brooklyn, expressed himself: "The whole principle of exposing the patella and refreshing the fragments and bringing them together is the outgrowth of the antiseptic principle, and to a very considerable extent it may be considered one of the most difficult achievements of antiseptic work. Now it seems to me that, in expressing an opinion upon the justifiability of an operation of this kind, we ought to qualify it somewhat in this way: That a surgeon who has become a master of the practice of antisepsis, as well as the principles, and who is able to control with certainty the conditions which surround his patient, would be justified in opening the knee-joint in a recent case of fracture of the patella and bringing the fragments together; but I doubt very much whether, excepting under such circumstances, it would be justifiable."

—In consequence of the criticisms passed upon the Board of Health in the matter of the death of Richard A. Proctor, the astronomer, particularly by George W. Wilson, a friend of the deceased, who declared that he did not die of yellow fever, an autopsy was held on the body by Drs. Prudden and Biggs, pathologists to the Board of Health. These physicians report that, while decomposition was so far advanced that it was impossible to arrive at a definite conclusion as to the cause of death, there was nothing to indicate that the cause of death was not yellow fever. This can hardly be regarded as a demonstration, and the diagnosis still rests in some doubt.

Society Reports.

ALLEGHENY COUNTY MEDICAL SOCIETY.

Special Meeting, August 21, 1888.

W. M. Brinton, M.D., President, in the Chair.

Dr. T. W. Shaw read the Report of Committee on the death of Dr. Thomas J. Gallaher.

Fatal Case of Typhoid Fever.

Dr. J. C. McMullen reported a case of typhoid fever. The case proceeded favorably until upon the seventh day milk was given the patient. This was followed by a high temperature and a rapid pulse. Vomiting supervened, and the patient died upon the thirteenth day. The value of milk as a food in typhoid fever was then discussed.

Dr. Wood thought it a case in which milk was injurious, and he considered the feeding of milk a frequent mistake. Some patients have idiosyncrasies that make milk harmful. Again, it is a proper food late but not early in the disease. Good digestion of milk is often insured when whey, or half milk and whey, is given.

Dr. J. M. Batten thought the case a malignant one, and its termination in no manner influenced by the milk administered. The temperature should have been controlled by cold baths instead of by quinine, as was done.

Dr. W. D. Kearns said that beef tea is proper food when milk is rejected, and that high temperature is not to be feared to the extent formerly believed. He never exhibited antipyretics in his practice, but stimulated the patient, giving quinine and carbonate of ammonia.

Dr. Stewart called attention to the utility of butter-milk where milk was rejected.

Dr. McCann thought that, as a rule, typhoid fever is badly treated. The patient is over-medicated and over-fed. Milk, because of its decomposition in the intestinal canal, is not a safe food. During this process the poisonous animal alkaloids are formed, and they, acting through the nervous system, induce relapses, high temperatures, and other unfavorable events. He uses antifebrine and sponge baths for high temperature, and prefers gruels, vegetable juices, and beef tea to milk.

Dr. E. T. Painter read a paper on

A Case of Œsophageal Stricture.[1]

Dr. Duff presented a case of

Purpura Simplex.

A child had been suffering from diarrhœa for some three or four weeks, and had received home remedies which would check it for a time, but it had returned in a few days. The child had been in this condition until the time I saw it. Upon seeing it I discovered at once it was a case of what I would term purpura simplex. There were spots of all grades upon its back and extremities, some very livid and some a pale yellow color as they were disappearing, all being, with one exception, about the size of a finger-nail. One on the back was perhaps the size of a silver dollar. I gave the child some bismuth and pepsin, and in the interim between the doses of pepsin I had it take two drops of aromatic sulphuric acid. It improved in a few days and then took a slight relapse, so far as the diarrhœa was concerned; but the spots continued to disappear. It got so well that I didn't see it for several days. I was sent for perhaps a week afterward and notified that the diarrhœa had returned, with vomiting. I saw it and continued the same treatment with the addition of lime-water. The child improved again for three or four days, when I dismissed it, as I thought it comparatively well. Its mother took sick within a few days after this, and I attended her for two or three days, when my attention was drawn to the child as suffering very materially from its teeth, as it was biting its gums and crying a great deal. I examined its teeth, or its gums, and found them very much swollen. I examined especially in the region of the upper canine teeth. I thought to relieve it by scoring the gum; this was in the evening, about five or six o'clock. I scored over one of the canine teeth and went home, thinking nothing of it. About daylight I was called to the house, and found the child lying in bed, the mother's clothing all over blood, and the bed bloody, and the child pulseless. I administered restoratives and worked with it for some time until it revived somewhat. In the afternoon I saw it again, and the purpuric spots had reappeared on its back and there was some hemorrhage from the bowels, as well as hemorrhage from the bladder. The child died the next morning. I may say that it is not strictly a case of hæmophilia. I examined the histories on the father's and mother's side, and there was no history of hemorrhage in the family, with the exception of the father, who has frequently had severe hemorrhages from the nose. There is no history of tubercular trouble in either branch.

[1] See p. 398.

Dr. J. J. Buchanan read a paper on

Fractured Patella Treated by Wiring.[1]

Dr. Murdoch, in opening the discussion on Dr. Buchanan's paper, said: The case is certainly a very interesting one, and, as far as I know, it is the first case in this city in which the patella has been wired, either for simple or compound fracture. Every one who has had much practice in fractures of the patella has found some difficulty in keeping the fragments in position. Long before the use of antisepsis, or any attempt thereat, in order to hold the bones in position, Malgaigne's hooks were used; they are to be had yet, I suppose, in any of our surgical instrument stores. They were used in such cases successfully, but owing to the fact, probably, that the wound was not made aseptic, the operation was abandoned as leading to inflammation and disease in the joint.

The operation for union of the patella is one which the doctor says has an increased risk. By the old method of treating fractures of the knee the patient usually got well. For my own part, I think this operation involves a great risk, which a surgeon ought to estimate at its just weight. There have been several deaths from wiring the patella. In all cases of compound fracture of the patella, it should be wired if there is difficulty in keeping the fragments together by the ordinary apparatus.

I would say that, perhaps, in some cases it should be wired by a surgeon who is a master of antisepsis, and to those who have not the facilities of carrying it out thoroughly I would say, be careful; you might sacrifice a life, whereas, by using the old method of treatment, you would be perfectly safe, and would save the patient, possibly, with a halt in the gait. In one thing I disagree with Dr. Buchanan, and that is the idea of leaving such a serious matter to the patient himself. I don't think any patient is capable of judging the dangers he runs in undergoing an operation of that kind. He knows nothing about the value of antiseptics in the treatment of wounds; he doesn't know that it is any

[1] See p. 399.

different to perform an operation with antiseptic treatment than without; and to leave the question to a man ignorant of such matters, without being able to tell him how much risk he runs, I do not think it proper or right. I think the surgeon in such a case should be the judge, and should say to the patient which treatment will be proper.

Dr Buchanan: I would like to say that the patient ought to have the first choice If he should say, "I consider my life of the first importance, I don't want it to be put in the slightest jeopardy," as any of you gentlemen might say, then I take it to be the surgeon's duty to say, "We'll do the best we can for you." But as this man says, "I am a laborer, my life depends on the usefulness of my limb; if I have a crippled limb I cannot make my living; how much risk is there?" I say to him, "I don't think there is one chance out of ten, probably not one chance out of twenty that you will die." And there are cases by the dozen where the conditions are as I have stated, and where the patient will say, "I will take that chance; give me the strongest limb, for I can't make my living without it." Under these circumstances I think that the man has a right to his choice, and I think we can give him some idea of the risk he runs by telling him how many in the long run lose their lives by the operation.

AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

Second Annual Meeting, at Washington, September 18, 19, and 20, 1888.

Edward L. Keyes, M.D., of New York, President.

After a brief address of welcome to the members, the President introduced Dr. Roswell Park, of Buffalo, who read a paper on

Pyæmia as a Direct Sequel of Gonorrhœa.

About a month before his admission to the hospital, the patient who formed the subject of the paper contracted a gonorrhœa. The discharge ceased after about two weeks, and a few days later swelling of one knee developed, which was treated by a physician for gonorrhœal rheumatism. When admitted to the hospital, one knee was greatly swollen, the other less so, and the symptoms were typhoidal. They increased in severity and ended in death. The autopsy revealed pus in several joints, and an abscess and erosion at the articulation of the clavicle with the sternum. The mesenteries were enlarged.

Cases of pyæmia as a direct sequel of gonorrhœa, Dr. Park said, were extremely rare. It had not been proved that the gonococcus could give rise to the sepsis. But he had examined and found the presence of septic microbes in all urethræ which he had examined, whether the discharge were evidently gonorrhœal or apparently healthy.

Clinical Observations on Gonorrhœa, with Special Reference to Etiology, Duration, and Treatment.

Dr. John P. Bryson and Dr. Edwin C. Burnett, of St. Louis, presented the paper. The authors believe that in order to obtain a true history of the course of gonorrhœa, only virgin cases should be studied; that following the course of such cases one can easily convince himself of its specific nature from the peculiarity of its clinical phenomena alone. Chief among the clinical phenomena in establishing it among the definite specific diseases, is a tolerably definite period of incubation, which varies from three to ten days. The gonococcus of Neisser is present in specific cases, and in such cases the inflammation is greater than in urethritis due to traumatism or chemicals, and complications, such as chordee, epididymitis, etc., are much more frequent; there is obstinacy to all treatment and a tendency to chronicity. The proneness of specific urethritis to indefinite chronicity has been overlooked by most surgeons and has led to great errors in prognosis and as to the value of topical treatment. The abortive treatment they regard as both inefficient and harmful. Local treatment of all kinds is not justified in the first and second stages. All local applications should be reserved for the third or declining stage. They recommend internal administration of remedies supposed to have germicidal value, and the restriction of the diet. The gonococcus of Neisser they look upon as an essential etiological factor.

Retro-injections in Gonorrhœa.

Dr. E. R. Palmer, of Louisville, opened his remarks by a reference to Dr. Brewer's paper read before the New York Dermatological Society, and one read before the Kentucky State Medical Society on the use of retro-injections in gonorrhœa; and said that according to his experience with the method, recently, it resulted in many cases for a time so nearly in a cure that it led

both patient and doctor into the delusive belief that the trouble was over. But after a time the patient would go to another physician or return for treatment. Consequently the speaker had found it best and necessary to resort to mixed local treatment, making the injections of a weak solution of bichloride of mercury (1–30000) and also employing a solution of boric acid or salicylic acid.

Dr. Sturgis, Dr. Bangs, Dr. Taylor, the President and those who discussed the paper coincided in the belief that as a rule gonorrhœa could not be cured inside of five or six weeks, and that then patients would still find the physician's aid necessary.

The Use of Nitrate of Silver in the Local Treatment of Chronic Urethral Discharges.

Dr. F R. Sturgis, of New York, in this paper, devoted a few remarks to the pathological appearances of the diseased mucous membrane in cases in which it is desirable to make the applications; he described a small endoscope through which he was enabled to make the applications just where desired, and thus avoid the pain to the patient and the injury resulting from the solution coming in contact with the healthy portions of the urethra. Applications frequently made of solutions of nitrate of silver of from twenty to forty, and even as strong as sixty grains to the ounce had in his practice soon changed the character of the lining membrane for the better and caused the discharge to cease entirely.

The Diagnosis and Treatment of Chronic Urethritis, with Demonstrations of Instruments.

Dr. Oberländer, of Dresden, Germany, sent this paper, which was read by Dr. J. A. Fordyce. It contained a description of an endoscope employed by the author, which made very excellent illumination of the diseased urethra. The appearances found in different degrees of inflammation received considerable attention, and in the latter part of the paper the author spoke in favor of dilatation in preference to cutting operations in overcoming the tendency to stricture. The dilator was like that of Otis's, and was covered with rubber. As soon as dilatation was made much could be effected, he said, by medication. Of injections, he gave the preference to bichloride of mercury and nitrate of silver. He had discarded the galvano-cautery and sulphate of copper.

The President, Dr. Taylor, and others present had found the use for the endoscope limited.

Connection Between Masturbation and Stricture of the Urethra.

Dr. Samuel W. Gross, of Philadelphia, in this paper added a large number of cases to those which he first published in 1887, calling attention to the fact that masturbation is a common cause of stricture of the urethra. The examinations were made of persons who had never had gonorrhœa nor an injury of the perineum. In nearly nine-tenths of all the cases there was a stricture, nearly always of large calibre, usually single, and situated near the orifice.

Dr. Weir admitted the common existence of coaptations of the urethra as described by Dr. Gross, not only in masturbators, but in others as well, and he could not attribute them to the habit of masturbation. In general, the other members who participated in the discussion agreed with Dr. Weir.

Dr. Gross replied that in these patients the urethra was extremely sensitive to the passage of instruments at the point or points of stricture, that the endoscope showed congestion, and that division of the coaptation near the meatus could be made and the tissue examined, showing that it was true stricture.

The Curability of Urethral Stricture by Electricity: An Investigation.

Dr. E. L. Keyes read the paper. He had been led to make investigations regarding this method of treatment because several patients who had consulted him were not willing to receive any other. Hoping to be convinced of the great value claimed for it, he had sought advice and instruction himself and through his assistant from Dr. Robert Newman, who had very kindly granted his request. Altogether there were seven cases, two treated by Dr. Keyes, one by Dr. Newman himself, in the presence of Dr. Keyes's assistant, Dr. Fuller, and the others by Dr. Fuller, in each instance Newman's method being employed. In no instance had any more benefit followed the use of electricity than would follow any ordinary dilatation. The pain which it occasioned, the necessity for putting the patient to bed, and the danger of perineal abscess which threatened, were to be noted.

A current of two and one-half milliamperes was harmless, but he believed that it also had no effect whatever; a strong current, he said, was fraught with danger. The case treated by Dr. Newman was not benefited, although Dr. Newman took a different view

of it. In one case, the resistance to the passage of the instrument was not due to a fibrous stricture, and here no claim could be made for the electrical treatment, unless in overcoming spasm.

Dr. Watson, of Boston, had used Newman's method of employing electricity in six cases of stricture, without successful results; it had been unsatisfactory in the hands of Dr. Bangs, Dr. Sturgis, and Dr. Tilden Brown; and Dr. Chismore, after one success apparently due to electricity, had found it without benefit.

Notes upon the Prognosis of Organic Stricture of the Urethra.

E. Hurry Fenwick, F.R.C.S., of London, sent the paper. He said that in the obstruction offered to the overflow of urine by an unrelieved stricture, three muscular systems, the vesical, ureteric, and cardiac, became successively affected with hypertrophy. This increase of expulsory power was rarely of long duration, relaxation and atony taking its place. The cardiac condition was contingent upon the renal changes, which in their turn depended upon the failure of the barriers to backward pressure which healthy or hypertrophied vesico-ureteric muscles presented. Hence the importance of estimating the condition of these dyke-like muscles. Their energy or capacity might be appreciated by ascertaining the presence or absence of residual urine. The author gave the results of careful and systematic examinations of the residual urine in 75 cases of organic stricture, showing its relation to the prognosis of the disease. He thought such examinations should be made in all cases.

The Operative Treatment of Hypertrophy of the Prostate, with Stereopticon Demonstrations of Specimens, etc.

Dr. Francis S. Watson, of Boston, read the paper, and made quotations from the writings of surgeons of to-day, showing that professional opinion is at variance regarding the propriety of a radical operation of any sort in cases of hypertrophy of the prostate, and that at present no *rationale* underlay the operative treatment of the disease. The data, he said, were of two sorts, clinical and the collection of anatomical specimens, thirty-four in number.

He made three points, referring to the operation based on the specimens: One, the distance from the junction of the membranous and prostatic urethra to the most distant part of the median enlargement within the bladder, which he called the perineal distance; two, the form of the median enlargement; three, whether the bladder was of small capacity and non-distensible, or the contrary. On the nature of these three factors, he said, the choice of operation rested. If the perineal distance is not greater than two inches and three-fourths or three inches, the enlargement could be reached by the finger through the perineum and operated upon. If, however, the form of the median enlargement was very salient, approaching the pedunculated form, it would be better to approach it through the supra-pubic route, even though it could be removed through the perineum. Third, the distensibility or non-distensibility of the bladder made possible or impossible the supra-pubic operation with its modern technique of Petersen. In about two-thirds of the thirty-four cases the enlargement could have been approached through the perineal route, while in the other third the supra-pubic operation would have been necessary. Clinically, the mortality had not been greater than by palliative treatment, and the permanency of results had given much encouragement. The author had operated in two cases; in one the patient died of irritative fever, and in the other the patient was well after three weeks, and had remained free of his urinary and prostatic troubles.

Dr. Abner Post, of Boston, then read a paper on

Prostatotomy for Enlarged Prostate at the Age of Forty-two Years.

The exceptional features in this case referred to the age of the patient (forty-two years), the character of the growth (being very hard and smooth, but not cancerous), and to the question of the proper method of treatment. The growth he thought was a distinct fibroid. The obstruction to urination was overcome by perineal division of the hard growth, and the use of a drainage-tube for a time, which prevented re-closure and contraction at the severed portion. None of the specimen was removed for microscopic examination. The patient is well.

The History of the Filaria Hominis;

its discovery in the United States, and especially the relationship of the parasite to chylocele of the tunica vaginalis. Dr. W. M. Mastin, of Mobile, was the author of this exhaustive paper, which also included the history of a case originating in the U. S. observed by Dr. Mastin. There was ground, he said, for the belief that a filarial

infested individual was rarely if ever in a perfect state of health.

Clinical Observations on Diseases of the Testicle.

Dr. L. B. Bangs, of New York, read a paper which contained the histories of three or four cases illustrating the difficulty of diagnosis and other points connected with diseases of the testicle. He believes that in far the greater number of cases inflammation of the testicle is due to direct injury or extension of inflammation from the prostatic urethra.

The question of removal of the testicle for tuberculosis having been raised, the President expressed the opinion that the tendency regarding extirpation was toward conservatism.

Dr. Bryson concurred in this opinion, yet there were cases, he said, in which removal of the tuberculous testicle was clearly indicated.

Dr. Taylor thought that it was rational and conservative surgery to remove the tuberculous testicle, which, if it remained, only encumbered the scrotum.

A Case of Removal of both Testicles for Recurrent Carcinoma.

Dr. Frank W. Rockwell, of Brooklyn, related the case, which was that of a man who applied for admission to the hospital early in January, 1887, having two months previously noticed a hard nodule in the right epididymis. The epididymis had reached about six times its original dimensions. Dr. Rockwell extirpated the testicle with the diseased tissue, the testicle itself not being involved. The disease was scirrhus. The following May the same condition appeared in the left epididymis although the lymphathics were not at all enlarged, and there had been no recurrence at the original seat of the disease. The left testicle with the growth in the epididymis was removed, the testicle being free from disease, the nature of the affection being scirrhus. When last seen in July the patient was entirely free from recurrence.

Some Points in the Differential Diagnosis of Bladder and Kidney Affections,

with demonstrations of the cystoscope and other instruments.

Dr. Alexander W. Stein, of New York, read the paper. The following questions, he said, often arose: Are the bladder symptoms due to renal disease? Are the kidney symptoms due to vesical disease? Are they independent of each other? And when one kidney is involved, which is the offending member?

It had become an axiom, he said, that the more remote the pathological encroachments were from the vesical neck the more tolerant was the viscus of their presence. On the other hand, remote and often insignificant causes excited the bladder to undue irritability, even though intrinsic lesions might be absent. In a large number of cases of vesical irritability in women in which the exciting cause was obscure, dilatation of the vesical neck afforded prompt relief. The advantages of the cystoscope were pointed out, but there were conditions in certain cases, he said, which interfered with its use. Passing to methods for collecting urine directly from one ureter, the author described a catheter which he had invented for this purpose on the end of which was a rubber bulb with a fenestrum which he had found by experiments on the cadaver could be introduced through the urethra and applied directly over the mouth of the ureter. He thought it would prove successful in the living subject.

Demonstration of a Perfected Evacuator and an Improvement in the Method of Removal of Débris from the Bladder.

Dr. F. N. Otis, of New York, read the paper, reviewing the history of the evacuator as developed by Professor Bigelow and the improvements by him and by Sir Henry Thompson and himself. He also exhibited the latest evacuators of Professor Bigelow and Sir Henry, and referred to the faults of others. The great difficulty had consisted in preventing the return of the débris into the bladder with successive aspirations. He declared that his own instrument was perfect in this respect, and required neither screen nor valve; that it now possessed a great advantage over that of Bigelow and Thompson in being about a pound lighter.

Surgeon-Major D. F. Keegan, of Indore, Central India, sent a paper on

Litholapaxy in Male Children,

which contained a table showing particulars of 114 litholapaxy operations performed on boys at the Indore Charitable Hospital, India, from December, 1881, to June, 1888. The mortality had been three and a half per cent.; of later cases, only one and three-quarters per cent. The average weight of the stones was 95 grains. The largest weighed in pieces over 600 grains. The average stay in the hospital had been six days. There had been, so far as was known, no recurrence.

Operations on the Kidney.

Dr. William H. Hingston, of Montreal, in this paper discussed more particularly nephrectomy, giving a brief historical review, and answering objections to the performance of the operation. The most difficult question of solution in the whole range of surgery, he said, is, What cases of renal disease are suitable for operative interference? Floating kidney had been mistaken, he said, for a diseased ovary; hydronephrosis for cystic tumor; cyst of the kidney for cyst of the ovary, for cyst of the liver, for carcinoma of the kidney, and so on. In one of his own cases, he had found it impossible while operating to say positively whether the tumor which he was removing was a tumor of the kidney or of the ovary. He recited some other cases from his own practice illustrating difficulty in diagnosis of affections of the kidney. In two or three cases, he had been able to distinguish between other tumors and a tumor of the kidney only by the presence of a limited resonance to one side of the umbilicus below the false rib. This was sometimes present in ovarian tumors, but very rarely so. The author claimed precedence in the removal of the kidney, having done the operation shortly before Simon, twenty years ago, the date of his operation being March 7, 1868. The tumor, a fibroid, weighing 15 pounds, was removed through an abdominal incision. The patient died before the completion of the toilet, the operation having occupied nearly three hours. Generally, the lumbar incision should be chosen.

Case of Nephro-Lithiasis, Complicated with Hydro-Nephrosis, in which Lumbar Nephrotomy was Performed.

Dr. Frank W. Rockwell, of Brooklyn was the author. The case illustrated in a marked degree the difficulties and uncertainties of exploratory operations as practiced in the lumbar region, and certainly for small calculi in normal or slightly diseased kidneys. The man first consulted him in the fall of 1887. When a boy he had suffered from hæmaturia and a calculus had been passed. When seen by Dr. Rockwell he had renal colic, hæmaturia, and at times there was fulness in the right flank. Retention of urine occurred more than once. Dr. Keyes saw the patient in consultation, and advised, if other measures failed, an exploratory operation. The posterior incision was chosen, and performed in December. There was much difficulty in reaching and palpating the kidney. At one time Dr. Rockwell thought he felt a hard substance in the kidney, but was unable to feel it again, and the wound was dressed. The patient continued to suffer until the latter part of January when much relief followed the passage of a stone. Again in March another fragment was passed, but he had not yet entirely recovered from his former symptoms. Dr. Rockwell thought that if what he felt during palpation of the kidney was the stone, he had probably hastened its passage down the ureter.

Discussion on Papers of Dr. Hingston and Dr. Rockwell.

Dr. Parks, of Chicago, exhibited a renal calculus removed by lumbar nephrotomy. He first saw the man last May, and learned that he had suffered from intermittent attacks of pain and symptoms of renal calculi for ten years, the pain always being referred to the neighborhood of the left kidney. The symptoms in general pointing to renal calculus, he performed lumbar nephrotomy. There was great difficulty in fixing the kidney so as to palpate carefully it. He punctured the kidney in various places, but was still unable to feel the stone, and was about to give up the operation, when he again introduced his hand and on the posterior surface of the kidney felt a hard substance. The stone was rough, had numerous facets, and was grasped tightly on all sides, but he was enabled to remove it by a pair of slender forceps. The man made a good recovery and was quite relieved. He had performed nephrectomy in one case, removing a tubercular kidney as large as a man's head through a lumbar incision which was extended around in front of the anterior superior spinous process of the ilium, the point of the last rib being tilted out of the way. Regarding the diagnostic significance of the circumscribed area of resonance referred to by Dr. Hingston, he with others had mistaken an ovarian tumor for a diseased kidney because of the presence of resonance limited to the inferior right iliac region.

Sir William MacCormac mentioned the case of a young man who had symptoms of renal calculus sufficiently distinct to lead a surgeon in St. Bartholomew's to undertake nephrotomy by the lumbar incision, but no stone was found. The patient afterward came under his care at St. Thomas's, when the symptoms were very severe; but in view of the negative results of the former operation he hesitated to interfere. He sent the

patient away, but he returned after a time, and as the pain was referred more particularly to a point corresponding to about the middle of one ureter, he explored this canal, but found nothing and closed the incision. He learned that the patient afterward passed an examination for admission to the army, and was then perfectly well.

The speaker then related three cases of injury to the kidney and sought the advice of those present. Three boys had been run over in the streets of London, and suffered, he presumed, a rupture of the kidney, which was followed by a large hydro-nephrosis. In each one the tumor occupied the whole flank, extending to the median line. One boy after several tappings of the tumor, which contained urine, recovered. In the second case the tapping was continued about a year, but failed, and he then made a drainage opening, but this failed, and the sinus did not close, and lastly he removed the remains of the kidney and the boy got well. The third case was still uncured; aspiration of the tumor had failed, and the question arose, should drainage be attempted, or should the kidney at once be removed? It was because of the trouble from the fistula which was made for drainage and afterward refused to close that the kidney was removed in the second case.

Dr. Fred Lange, of New York, discussed the choice of operations. He had never operated for tumors of the kidney. He had removed the kidney the seat of pyo-nephrosis, and in these cases he would always choose the lumbar incision to avoid septic infection of the peritoneum. In some other conditions the anterior incision might be preferable. Much care should be taken not to break off any facets in removing the stone from the kidney for evident reasons. He had devised some instruments for its safe removal. It was surgical vandalism to extirpate the kidney for symptoms of renal calculus so long as there was a possibility of removing the stone alone. The stone might be in the opposite kidney from that to which the symptoms had been referred.

Dr. Gill Wylie, of New York, had operated upon the kidney seven times during the past four years, in two cases cutting posteriorly and fixing the dislocated kidney, and in five cutting anteriorly and removing the organ. As to what cases should be operated upon, much would depend upon the subjective symptoms. If these were not severe, the patient would be likely to refuse an operation however much it was urged by the surgeon. As to choice of operations, he did not doubt that when the kidney was loose from its natural bed, or was enlarged, the anterior operation was the easier and safer. He had had no trouble from hæmorrhage or shock in the anterior operation. If there were strong evidences of pus, he would prefer the posterior operation. If he could not remove the kidney easily, he would close the wound, and subsequently make the anterior incision. A glass tube instead of a rubber one should be employed for drainage; the glass tube remained patent.

Dr. Ransohoff, of Cincinnati, had removed a hydro-nephrotic kidney through an anterior incision made for exploratory purposes, but the patient died of sepsis. He believed the anterior incision should be adopted in most cases, except when there was special danger of sepsis.

Dr. De Forest Willard thought that if the diagnosis was not pretty positive, the anterior incision should be chosen.

Dr. R. F. Weir, of New York, had done two nephrectomies, three nephrotomies, and had had one case similar to that narrated by Dr. Rockwell. In this case the kidney was thoroughly palpated, but no stone could be felt, and the operation was abandoned. Within twenty-four hours afterward, the patient was entirely relieved, and the urine was changed only in being somewhat bloody and containing a large number of uric acid crystals. He was rather loth to believe, therefore, that the trouble was due to only a recently-formed calculus. Yet it was known that the handling of the kidney in searching for a stone, none being found and none being passed, had in several instances resulted in relief of the patient. Regarding Sir William MacCormac's case, he suggested giving the patient the trial of drainage before proceeding to nephrectomy. While he agreed at present with Dr. Lange in his preference for the posterior incision in cases of danger from sepsis, yet his conviction was not so firm but what he might soon change it. Might not the peritoneum, he asked, be stitched to the edges of the wound in a way to prevent danger of septic matter entering its cavity?

Dr. Annandale, of Scotland, had cut down upon the kidney and palpated for stone in a number of cases, and, finding none, closed the wound. Yet the patients, excepting one, had afterward been relieved of their symptoms.

The President was of the opinion that in Sir William's case he would remove the

kidney at once, since the attempt at drainage had resulted so unsatisfactorily in the first case.

Dr. G. R. Fowler, of Brooklyn, had, in the case of a woman suffering from nephrolithiasis, made an abdominal incision and palpated the kidney, but discovered nothing. Her sufferings increased after a year, when he made a lumbar incision over the left kidney, but again found nothing. After the second exploratory operation, however, the patient's symptoms disappeared.

The discussion was closed by the authors.

On the Effects of Rapid Changes of Altitude in an Advanced Case of Interstitial Nephritis.

Dr. George Chismore, of San Francisco, read the history of the case, that of a man who had peculiar aggravation of conditions related to his kidney affection when reaching the high points in the mountains on a journey from San Francisco to New York, in which latter city his case terminated fatally. The paper was a pioneer one in this line of investigation.

Résumé of an Experience of Seventeen Years with the Operation of Dilating Urethrotomy.

Dr. F. N. Otis, of New York, in this paper, traced the successive improvements made in his dilating urethrotome since its invention in 1872, showed the advantages of this method of treatment over previous and other more recent methods, and the discoveries which it had led to, as to the relative size of the penis to the urethra. He had used the dilating urethrotome in more than a thousand cases, and had never had a death nor abscess result. He used only the short straight instrument, and pointed out the dangers of the other, which instrument makers would not take off the market. The incision should be exactly in the median line on the roof, not the lower surface. As to the radical cure of stricture by this treatment, he had tabulated a number of cases which he had been able to trace some years after the operation, and in a large percentage there had been no recontraction. The first case he ever operated upon with the dilating urethrotome presented recently the same size of the urethra as after the operation years ago.

Stone in the Bladder in Connection with Splenic Leucocythæmia.

Charles Williams, F.R.C.S., Norwich, England, sent the paper. The tendency to rapid formation of uric acid stone in splenic leucocythæmia was suggested, and the dangers of operations because of liability to hemorrhage were pointed out. His patient was operated upon, and died some days afterward.

Case in which the Bowel Ended in the Urethra in a Child Aged Four Weeks; Relief by Operation.

Dr. Arthur T. Cabot, of Boston, presented the paper, the first part of which dealt with the embryonic development of the bowel and urethra, and the last part treated of the operation resorted to for forming an anus. Except when constipated, all the fæces passed through the anus since the operation.

Perineal Litholapaxy.

Mr. Reginald Harrison, of Liverpool, had found it desirable in certain cases of vesical calculus to revive an old operation —entering the bladder by perineal urethrotomy and distending the vesical urethra with the finger, introducing a forceps, crushing the stone, and removing the débris by flushing the viscus. This procedure had been indicated in some cases in which recurrence of the stone could be predicted with certainty were ordinary litholapaxy resorted to. A diseased condition of the bladder was often the cause of stone formation rather than purely a result, and treatment of the vesical affection by drainage, etc., was necessary to prevent recurrence of stone.

An Unusual Case of Urethral Calculus,

was the title of a paper by Dr. H. G. Mudd, of St. Louis. The patient, a negro over forty years of age, had a calculus in the urethra in advance of the bulb, which when removed measured three inches in circumference and two and a half inches in length, and weighed 281 grains. Other smaller stones were situated in the membranous urethra. A small stone had probably lodged in the urethra two years before, forming the nucleus of the large stone. The patient regained his health.

Syphiloma of the Vulva

was the title of a paper presented by Dr. J. Nevins Hyde, of Chicago.

Election of Officers.

Dr. R. W. Taylor, of New York, was elected *President;* Dr. J. P. Bryson, of St. Louis, *Vice-President;* Dr. A. T. Cabot, of Boston, *Secretary.*

The next meeting will be held at Newport, sometime in May, 1890, the exact date to be determined by the Council.

Foreign Correspondence.

LETTER FROM SYRIA.

Since coming to the East some ten months ago, I have often wished to have time to send you some description of many of the interesting things met with here, but my time up to this moment has been too fully occupied to do so. Medical practice in this country is truly no sinecure. After arriving here in October, 1887, two months were taken up with a trip to Constantinople for the purpose of having my diploma *visé*. Here is situated the only legalized medical college in the Turkish Empire. No one is permitted to practice here until he has passed a satisfactory examination before the professors of this college. These examinations are conducted either in French or Turkish, as the candidate may desire. I had no difficulty whatever in obtaining an examination, which was conducted in a very fair manner, although I have heard many complaints from those who have applied for examination. The college building is a very dilapidated old structure standing outside of the business part of the city. The students seemed to be principally boys of from sixteen to twenty years of age.

I entered upon practice about the middle of January. It has been my custom to hold a clinic during the forenoon of five days each week. The number present at these clinics ranges from twenty to forty each day. Almost every variety of disease may be seen here—ophthalmia, the scourge of all eastern countries, is very prevalent. Rheumatism, also, which is largely caused by the damp ill-ventilated houses which the people occupy, is common. The only remedy that seems to have much effect here in the latter disease is iodide of potassium, in doses of fifteen to twenty grains a day. Both intermittent and remittent fevers prevail largely, and are frequently very obstinate.

There is one thing an American has to learn over again when he comes to this country to practice, and that is, the amount of cathartic medicines to administer. The ordinary doses recommended by our text-books are utterly useless here. From six to ten compound cathartic pills is an ordinary dose; and so are the following: from ten to fifteen pills of elaterium, one-tenth grain; podophyllin, two to three grains; gamboge, fifteen to twenty grains; castor oil, ten to twenty drachms; Epsom salt, two ounces. It requires some little practice to make one feel safe in giving such doses, but smaller are useless, and even such doses as are mentioned above often fail and have to be repeated. I hope to have time during the coming year to report the treatment of some cases of interest.

The Reporter comes regularly and is a welcome visitor. It is just the thing for the busy practitioner, who has not time to read long and tiresome articles to get what he wants. It is eminently practical and to the point.

With kind regards and well-wishes for the success of the Reporter, I remain,

Yours truly,

Latakia, Syria, J. M. Balph, M.D.
August 10, 1888.
(Med. Miss. R. P. Church.)

Periscope.

Poisoning with Kerosene.

Dr. K. A. Norderling, in a communication to the *Medical Record*, July 21, 1888, says that he was called on June 29 to see a child, eleven months old, who had swallowed an unknown quantity of kerosene. He arrived in about ten minutes after the accident had occurred, and found the little patient in the following condition: There was drowsiness, which was on the increase; and she was feverish; pulse, 150, weak; respiration, 40; face and neck covered with perspiration, extremities cold. When the accident occurred, her mother heard her cry, ran to her help, and found her in a very cyanotic condition, with kerosene vapor coming from her mouth. All the mother did was to sprinkle water in her face. Upon Dr. Norderling's arrival he immediately administered all the milk the patient could drink, and then wine of ipecac, which in five minutes brought on vomiting. The kerosene could be easily seen floating on the top of the vomited matter like fat globules in a soup-dish. Before leaving, he told the mother to give the patient all the milk she could drink, and also to give her castor-oil. Next morning the mother told him that the child had had one movement of the bowels in the morning, but neither that nor the urine which was passed all right had any odor of kerosene. She had been very restless during the night, coughed a little, and moaned between times. At noon the fever was high, 104° F. in the axilla; the pulse weak, 150; and she was still in a drowsy condition. In the evening of the same day the patient was nearly without fever, and looking bright, and the next morning she was perfectly well.

Terebene in Bronchorrhœa.

Dr. John W. Martin, in a communication to the *Medical Press and Circular*, August 29, 1888, says that he has employed terebene in three cases of bronchorrhœa, with marked success. His first case was that of a woman 79 years old, who had an attack of right hemiplegia, followed by a severe attack of broncho-pneumonia. At the decline of the inflammatory stage profuse bronchorrhœa set in, accompanied by a state of great exhaustion. A variety of treatment failed to give relief. In addition to the bronchial discharge there were urgent digestive troubles, dyspepsia, flatulent distension of the stomach and intestines, causing much inconvenience to the action of the heart, and seriously interfering with the administration of proper nourishment. The urine was free from albumin. Terebene was first ordered dropped on a lump of sugar, but this proved to be disagreeable to the patient, so that the following formula was substituted:

Gum terebene,	
Spt. chloroform	aā m̄ x
Mucilage of tragacanth	f℥ i
Syrup	f℥ ss
Water	q. s. ad f℥ i

Dr. Martin states that from the day the terebene was ordered there was a steady improvement of a most marked character. Of the other two cases one was a man, about 40 years old, suffering from passive broncho-pneumonic congestion, attended by profuse expectoration. The patient was very weak, and no treatment seemed to give relief until he was placed upon terebene. Immediate benefit was apparent. Marked diminution was noticeable at the end of twenty-four hours, and expectoration ceased within three days. The further progress of the case was in every way satisfactory. The third case was that of a wine merchant's traveller, who had, at the outset, acute broncho-pneumonia. When the acute symptoms subsided, profuse expectoration remained a very troublesome symptom. Various remedies failing to check this discharge from the lungs terebene was ordered by Dr. Martin with rapid and most beneficial results. The expectoration almost disappeared at the end of the third day, and the patient steadily improved. In prescribing terebene or turpentine, he regards it as necessary to be careful to examine for kidney mischief. If such is present, he would regard it as a contra-indication to the use of terebene.

Medico-legal Aspect of Wounds of the Heart.

M. Sal. Charrin, says the *Bulletin Médical*, July 29, 1888, has written an interesting thesis based upon the case of a young man who had received a stab wound of the heart, and who, before death, was able to talk, and to run ten metres (about eleven yards). At the autopsy it was found that the point of the instrument had penetrated the sternum at the lower border of the third rib on the right side, and opened the right ventricle at its lower part.

The question of surviving such a wound may be very important from a medico-legal point of view. Upon the fatality of wounds of the heart the author gives the following conclusions: In spite of their gravity wounds of the heart may in certain cases be survived a variable length of time, and permit the patient to talk, to defend himself, and in a word to perform voluntary acts. Statistics show that the fatality of wounds of the heart varies with the part of the organ injured. Wounds of the right ventricle, which are the most frequent, are less dangerous than on those of the left, and the latter are less grave than those of the auricles. Statistics show also that this fatality varies with the nature of the vulnerating body. Wounds of the heart made with pointed instruments are the least dangerous; then come wounds by cutting instruments, by fire-arms, and last, wounds of the heart as the result of contusions.

Researches upon Yellow Fever.

At the meeting of the Academy of Medicine of Paris, July 24, 1888 (*Gazette Hebdomadaire*, July 27, 1888), Dr. Gibier announced the result of the researches which he had made at Havana into the etiology and treatment of yellow fever. He finds that the blood, urine, bile, the pericardial cavity, and the viscera (except the intestines) of persons affected with yellow fever do not contain, in the great majority of cases, any micro-organism. On the contrary, the intestine contains a black or dark material, which is more or less abundant and toxic. M. Gibier has isolated from this a bacillus which seems to play an important part in the coloration of the substance, if not in the origin of the disease itself. From this it follows that the most rational treatment consists in repeated purgation and the use of intestinal disinfectants. This treatment is said to have succeeded in a grave case.

THE
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REPORTER.

ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D., EDITOR.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

SURGERY OF THE BRAIN AND SPINAL CORD.

Among the triumphs of modern surgery none have been more brilliant than those achieved in dealing with injuries and diseases of the brain and spinal cord. The time was—and not so very long ago—when these structures were considered almost beyond the reach of surgical skill. Those who are familiar with the history of surgery know that some very remarkable operations were performed upon the cranium and membranes of the brain more than a century ago; but these were rare events and very different from the deliberate and carefully designed operations of the present day. Modern surgery of the brain and spinal cord may be said to date from the year 1861, when Broca laid the foundation of what is now known as cerebral localization, and to owe its present position to the labors of Hughlings Jackson, Fritsch and Hitzig, Ferrier, and Charcot. Their studies have now become the property of all well-instructed surgeons, and in every part of the civilized world surgeons now approach the brain with a confidence and success which a few years ago would have been thought to be incredible.

It is not so astonishing, then, to find one like Macewen, of Glasgow, reporting, as he did in his address at the recent meeting of the British Medical Association, twenty-one cases in which he had operated upon the brain for surgical lesions, although this number is relatively and absolutely a very large one. But the pride of surgeons will be aroused when they learn that after these operations there were eighteen recoveries and only three deaths.

The address in which Dr. Macewen reports these cases is one of the most interesting and instructive pieces of surgical literature which has appeared for a long time. In it he traces succinctly the history of brain-surgery and describes with great clearness the principles which should guide the surgeon in ascertaining the nature and extent of the lesion present and in operating upon the patient. The magnificent results obtained of late years are due, to a great extent, to the general adoption of antiseptic and aseptic methods in performing surgical operations. These it is which have emboldened the operator to apply the teachings of experimenters and students of pathology; and these have enabled surgeons to approach the brain and spinal cord with a confidence like that which they enjoy when operating in these last days on organs within the abdominal cavity.

Thus, keen observation and refined skill have contributed to make brain-surgery one of the highest achievements of the present day; and it may be hoped that with added experience the results attained in days to come will far surpass those which even now have done so much to elevate our art and to relieve the sufferings of our fellow-men.

ARTIFICIAL FOOD FOR INFANTS.

It is universally accepted that milk is the proper food for infants; and when they are deprived of their mother's milk, the problem is, to substitute for it milk which differs as little in composition, digestibility, and nutrient qualities as possible. For practical reasons cow's milk has been generally employed. Chemical and physiological investigation, and clinical observation have apparently established the differences, in composition and properties, between human milk and cow's milk. These differences have occupied the attention of investigators, and various methods, familiar to the profession, have been suggested for overcoming them. The excess of casein in cow's milk is usually overcome by the addition of water, and the lack of fat and milk-sugar in the mixture is supplied by the addition of cream and sugar. The acidity of the cow's milk is neutralized, or its alkalinity increased, by the addition of lime-water, as recommended by Meigs and others, or by a solution of carbonate of sodium, according to the formula of Vogel. J. Lewis Smith states that the alkali serves the further purpose of preventing the formation of large curds in the infant's stomach, by retarding the coagulation of the casein. The method of Dr. Frankland accomplishes the same result in a different way. The cream from one-third of a pint of milk is added to two-thirds of a pint of whole milk; the skimmed milk is treated with rennet, the whey separated, strained, and boiled, and the whey, together with one hundred and ten grains of sugar of milk, is added to the mixture of milk and cream. As our readers will see, this plan is similar to that so strongly recommended by Dr. Wood in the REPORTER of June 30. By any of these methods a compound is obtained which is very similar to human milk in chemical composition.

Unfortunately, cow's milk, even when thus treated, is not digested as easily as human milk. This is believed to be due principally to the fact that the casein of cow's milk tends to coagulate in the infant's stomach in the form of a large curd, while that of human milk coagulates in fine flocculi, which have the mechanical advantage of presenting a greater surface for the action of the digestive secretions. The use of an alkali to overcome this property of the casein of cow's milk has been mentioned; Jacobi recommends prolonged boiling of the milk, and the use of barley-water as a diluent, instead of water; Smith adds to the milk some farinaceous article, as grated "flour ball," in order to mechanically separate the particles of casein; others use the Liebig's food, kept in the shops; and last of all the extract of the pancreas of the pig has been used to partly pre-digest the casein, and thus accomplish the same result. Nevertheless, the annual slaughter of the innocents continues.

We are fully convinced that the workers in this field have accomplished much that is of value, and that they have placed the subject upon a scientific basis. At the same time, we believe that the experience of physicians practicing in rural districts, and the results of recent chemical and microscopical investigations, show that heretofore the subject has not been fully appreciated. In the REPORTER, August 11, Dr. Chenery gives his own experience and that of Dr. Lynde in support of the statement that, in the country, the feeding of infants upon cow's milk does not greatly imperil their health or lives. The result of the examinations of the feces of infants fed upon cow's milk, by Escherich, Uffelmann, and Forster, go far to show that the prevailing opinion with reference to the relative indigestibility of the casein of cow's milk is much exaggerated. These considerations, and the fact that artificial food agrees with infants relatively well in winter as compared with summer, appear to us to strongly support the recent view that an undue prominence has been given to the exact chemical composition of artificial food

for infants. From the same premises, the conclusion seems plain that it is the condition of the milk, as much or more than its chemical composition, which determines its utility as a food for infants. Else why the difference in results obtained in city and country, and in winter and summer? It is well known that milk found in cities differs from the fresh milk of the country, barring adulteration, in having undergone greater or less fermentative or putrefactive changes.

Since these facts seem to be well established, the next advance in infant feeding, in cities, must be made by improving the quality of the supply of cow's milk, or by rendering practicable the substitution of the milk of some other animal, as the goat, which can be obtained fresh when needed.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

EXCESSIVE VENERY, MASTURBATION, AND CONTINENCE. By Joseph W. Howe, M.D., Etc. 8vo, pp. 299. New York: J. H. Vail & Co., 1888.

The book before us is of a kind which, if written with judgment and a clean instinct, might be useful; but, unfortunately, we fail to discover evidences of either of these important qualifications in it, and, therefore, cannot see how it can accomplish any good. Like most books on sexual depravity, it presents a disgusting subject in a repulsive way. Added to this, it perverts facts which are bad enough in themselves, and makes statements which are utterly false. It contains stories which have nothing attractive about them but their nastiness, and which will appeal only to prurient minds. That the book has come to a second edition is a proof that the author and publisher find a market for such wares—a fact to be deplored by all who regard decency as an essential characteristic of the medical profession.

It is quite possible that the author may have written this book with a worthy purpose; but, if this was the case, his effort has been an unfortunate one, and should serve as a warning to any other writer who may be tempted to enter the same unsavory field.

PTOMAINES AND LEUCOMAINES, OR THE PUTREFACTIVE AND PHYSIOLOGICAL ALKALOIDS. By Victor C. Vaughan, Ph.D., M.D., Professor of Hygiene and Physiological Chemistry in the University of Michigan, etc., and Frederick G. Novy, M. S., Instructor in Hygiene and Physiological Chemistry in the University of Michigan. 8vo, pp. viii, 316. Philadelphia: Lea Brothers & Co., 1888. Price, $1.75.

In these days, every studious medical man ought to read carefully some good book on the ptomaines and leucomaines, which play such an important *rôle* in the production of disease, but which, until very recently, were almost entirely unknown. Some admirable works on this subject have appeared within the last year or two in Europe, especially in Germany; but it is fortunate that our own country has not lacked men thoroughly fitted to investigate them, and to report to their brethren not only what has been learned about them abroad, but also what they themselves have discovered. The book before us is unquestionably the book for American physicians, and we may congratulate not only the authors and publishers of it, but also the whole profession of our land, that such a book has been prepared and put out at so moderate a price.

Like all the publications of Lea Brothers & Co., this book is issued in very handsome shape.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage-stamp.]

A Brief History of Proceedings in the Medical Society of Pennsylvania . . . TO PROCURE THE RECOGNITION OF WOMEN PHYSICIANS, etc. To which is added an account of the measures adopted by the Society . . . to procure a law to authorize trustees of hospitals for the insane-poor . . . to appoint women physicians to have entire control of the insane of their sex. By Hiram Corson, M.D., Conshohocken, Pa. Philadelphia: Jas. B. Rodgers Printing Co., 1888. 8vo, 40 pages.

—This interesting pamphlet contains an account—written by the foremost advocate of the recognition of women as physicians in this country—of the struggles through which this cause has passed since 1858. It is a warm narrative, marked everywhere with the earnest purpose and determined resolution of its author, and is a valuable contribution to the history of medical politics in this State. It is to be regretted, perhaps, that the writer of it has not included an account of the recent election of a woman to membership in the Philadelphia County Medical Society, which, until recently, has been the most consistent and unyielding opponent to giving women the same recognition which is granted to reputable men engaged in the practice of medicine.

Literary Notes.

Science is a weekly periodical which devotes so much attention to matters of public health and medical progress that it is of exceptional interest for medical men. In addition to this, it contains, as might be expected, a great variety of valuable matter relating to other branches of science, and is an extremely useful compend of what is going on all over the world in these departments.

The Mid-summer Holiday Number of the *Cosmopolitan* contains a large number of excellent engravings, and an article on roses which is illustrated with excellent wood-cuts and beautiful colored plates. This is the only magazine, we believe, which uses colors in its illustrations, and those in the number under notice are more attractive than any which have yet appeared in it. An article on the "Ladies of the American Court" gives an interesting presentation of social life in Washington, and contains pictures of sixteen distinguished women of that city, Mrs. Cleveland naturally leading the number.

CORRESPONDENCE.

Ethics of Opium Habitués—A Reply.

To the Editor.

Sir: Your correspondent is greatly surprised that Dr. J. B. Mattison at this *late* date should reply to the objections made to his paper when it was read before the Society of Medical Jurisprudence, and which was noticed in the issue of the Reporter of July 7, 1888. At the close of the Society's discussion, Dr. Mattison having the opportunity to answer his opponents merely remarked that he "stood" by what he had written.

Now that he has used the valuable columns of the Reporter for the intention, perhaps, of crushing those who objected to his conclusions, we hope that we may succeed in demonstrating to the readers of this journal the errors which Dr. Mattison there presents.

Every authority, who has sincerely and conscientiously investigated the effects of the continuous use of opium upon the system, and who does not write in the interests of bringing opium habitués to his private asylum, or who does not pander to the perverted sentiments of his clientèle differs from Dr. Mattison. But it is not your correspondent's intention to show anything but the curious reasoning of the former gentleman. Dr. Mattison says that the general rule "that the general use of opium makes the male impotent and the female sterile" makes it difficult to conceive of *any* influence transmitted from generation to generation. In answer to this I would like to ask: Must the opium habitué be so absolutely impregnated with the drug before he makes an attempt to propagate his species? Has that habitué never had any sexual desire whilst taking the drug? If Dr. Mattison affirm the former and deny the latter we have nothing further to say than that his experience differs from that of every other investigator, and that his patients are singularly the demonstration of the rule and those of every other writer the exception. In the light of this it is remarkable that neurologists should have presented to their view cases of mental and physical defect in the offspring of parents addicted to the use of opium.

Let the latest work of the greatest of the authorities on this subject speak.[1] Erlenmeyer says: "There is a married couple in my practice of which both man and wife daily injected from 1 to 1.5 grammes of morphine for many years. She conceived from him and bore, after the usual period of pregnancy and in normal confinement, a vigorous child." Repeatedly has Erlenmeyer had the same experience with female habitués and of these cites no less than four among his fifty histories.

N. E. Brill, A.M., M.D.
805 Lexington Ave., N. Y.
September 10, 1888.

[1] Die Morphiumsucht, 3d Edition, 1887, p. 44. Von A. Erlenmeyer.

Negroes and Chloroform.

To the Editor.

Sir: Is there a case on record of a *full-blooded* negro dying during the inhalation of chloroform? I have asked many physicians this question, and have been invariably informed that they knew of none.

Yours truly, R. P. Huger, M.D.
Anniston, Ala.,
September 15, 1888.

NOTES AND COMMENTS.

Personal Identification.

A full report of a recent lecture on personal identification, by Mr. Francis Galton, appears in *Nature* for June 21 and June 28. Mr. Galton here presents a practical application of his favorite pursuit, the accurate description of physical and mental peculiarities. He proposes a very ingenious scale of divergencies from the normal for any one feature, and has even invented a mechanical device by which the tedious labor of arranging a large number of such observations can be much abbreviated. The anthropometrical laboratory, at which anyone can, under proper restrictions, have a record made of his chief physical measurements, is now open in London, and promises to yield valuable material for this line of study. In connection with this work, Mr. Galton has studied the striations of the human fingers, and is able to corroborate the value attributed to them as a means of identification. These markings are easily obtained, and the variety of them is larger than one would *à priori* imagine. The markings of a finger of Sir William Herschell, made in 1860 and 1888 respectively, are figured, and show a striking similarity. The difference in age of the two prints testifies to the wearing of the epidermis. The study is still in its infancy; but the success of such measurements for identifying criminals, as exhibited in France, promises to draw more general notice to the subject.—*Science*, July 27, 1888.

Quack Advertisements in Religious Newspapers.

The *Provincial Medical Journal* says: "A strong agitation has been started in America against the quack advertisements which appear in religious papers, and, in consequence of appeals made in the interests of morality, the respectable sectarian organs have declined to insert or renew those advertisements. A certain class of advertisements disfigure our English religious papers. It is to be hoped that they will copy the example set by their American co-religionists, and refuse them. Another class of advertisements are to be found in religious papers which do not offend against decency, but which are frauds. To promise a cure for incurable disease, or to offer a panacea which will cure all kinds of diseases, is to obtain money under false pretenses. A certain class of advertisements do this, and it must be known to the proprietors that these advertisements are dishonest and should not have a place in papers professing to teach morality."

Comparative Value of Codeine and Morphine in Diabetes.

Dr. J. Mitchell Bruce, in a communication to the *Practitioner*, July, 1888, gives the results of some experiments which he made in order to determine the comparative value of codeine and morphine in the treatment of diabetes. The experiments seem to have been conducted with great care, and show that morphine is to be preferred to codeine in the three respects of power, cost, and safety. The best effect was obtained from about six grains of acetate of morphine daily; from phosphate of codeine, not until about thirty grains (equal to twenty-one grains of codeine) were given daily. A patient consuming six grains of acetate of morphine a day would, therefore, considering the relative cost of the two drugs, be treated at about one-twelfth the cost of another taking twenty-one grains of codeine.

With regard to narcotic symptoms occurring under the use of morphine, Dr. Bruce says they have rarely presented themselves as long as the sugar continued to fall, when the drug was given every three or four hours by the mouth. He has found very decided evidence of the cerebral action of morphine in diabetes when the hypodermic method of administration was employed. He calls attention to the fact that the large size of the doses of these powerful drugs which are required restricts their general employment. The chief difficulty was found to consist in removing the last traces of the sugar, For instance, it required in the first case twice as much morphine a day to completely remove the sugar from the urine as it required to reduce it to 167 grains a day, which he regards as a comparatively safe excretion. He suggests that in routine practice a physician should be satisfied with this degree of success. He states distinctly, however, that the results which he has obtained refer entirely to the action of these drugs *plus* rigid dieting, as only by first establishing a sugar equilibrium by means of proper feeding can the real action of the drugs be ascertained.

United States Veterinary Medical Association.

The twenty-fourth annual meeting of the United States Veterinary Medical Association was held Sept. 18, in New York. Dr. Hoskins, of Philadelphia, for the committee appointed to secure a uniform standard of examination of veterinary colleges, reported that all but three colleges had agreed to extend the curriculum from two to three terms of six or eight months each. The three colleges which refused were those at New York, Chicago, and Toronto. The following officers were elected: President, Professor R. S. Huidekoper, of Philadelphia; Vice-President, W. B. E. Miller, of Camden, New Jersey; Secretary, W. H. Hoskins, of Philadelphia; and Treasurer, James L. Robertson, of New York.

Philadelphia Lying-in Charity.

The new hospital of the Philadelphia Lying-in Charity at the southwest corner of Eleventh and Cherry Sts., recently completed, is now open for the reception of patients. The building is a model of hospital construction. Married and unmarried women are cared for (during the lying-in period of their first confinements only) in the maternity wards and in private rooms. Private rooms and surgical wards for the treatment of diseases of women are in a separate and isolated portion of the building. Nurses are furnished to physicians at any hour of the day or night immediately and without charge. Physicians are invited to inspect the building, or if living at a distance to write for blanks for the admission of patients to Dr. Charles Meigs Wilson, Surgeon in Charge, southwest corner Eleventh and Cherry Sts., Philadelphia.

NEWS.

—Two refugees from a quarantine camp in Florida were arrested in New York on Saturday, September 22, and taken to North Brother's Island, where they will be kept by order of the Board of Health.

—In response to the call for volunteers of the order of the Red Cross, Dr. William Rickert left Baltimore for Jacksonville, Fla., where he will give his services for the relief of the sufferers from yellow fever. He leaves a family in Baltimore and abandons a remunerative practice.

—The *Lancet*, September 8, 1888, says that in the Tyrol there are so few applicants for vacant medical positions that in some cases these have to be given to students. The proprietor of a bathing establishment recently advertised for a physician for the summer months, offering board and lodging as remuneration. Not a single candidate presented himself.

—A new disease, according to the *Ledger*, September 19, 1888, is said to have affected the grape-vines of the Santa Ana and San Gabriel valleys of California. It is termed the "sapsour." The vines begin to wither and in a short time die. The disease is infectious, and spreads very rapidly. The best remedy thus far known is to dig up the vines as quickly as they show the blight, and burn them.

—Dr. George Dock has been elected Instructor in Morbid Anatomy and Bacteriology in the Texas Medical College and Hospital, Galveston, Texas. Dr. Dock is unusually well equipped for the position, both through his special studies upon these subjects in Germany, and in the Clinico-pathological Laboratory of the University of Pennsylvania, under Dr. Osler. His selection reflects great credit upon the judgment of the Faculty of the Texas College.

—Among the recent decrees made in France is one relating to the inspection of butter for the repression of fraudulent dealings. By this, special persons are authorized to take samples of butter in any place, whether the butter is exposed for sale, stored in a warehouse, or in transit by land or water. Each sample taken is to be subject to a special examination. Pure butter, mixed butter, margarine, oleo-margarine, and grease intended for consumption, in transit, must be contained in closed packages, and the origin and nature of the merchandise must be conspicuously specified thereon.

HUMOR.

Relieved in Mind.—Mother: "Oh, doctor! I'm so glad you have come. We have had such a scare. We thought at first that Johnny had swallowed a $5 gold-piece." Doctor: "And you found out that he didn't?" Mother: "Yes; it was simply a nickel."

"When does a man fail?" is a question that is being asked by the press with considerable freedom. A business man fails indeed when he fails to advertise; we have seen longer answers, but the above is complete in every particular and easily remembered.—*Hat Review.*

A Special Favor.—Bereaved Widow (to country editor)—"Do you charge for obituary notices, Mr. Shears?" Country Editor—"As a general thing, we do, Mrs. Bently; but your husband and I were very old friends, and I will only be too glad to publish his obituary for nothing."

An "In-growing" Town.—"Has the town grown much in the last ten years, Mr. Snaffles?" "Grown? My, yes! Why, this very lot we're standing on I paid $10,000 for in '72. I sold it in '81 for $2,000, and had to buy it back on foreclosure for $1,500. Stranger, you can see this town grow, but the trouble is it's an ingrowing town."

Anxious Mother: "You think he is out of danger now, doctor? He will get well?" Doctor: "No doubt about it at all, madam. The amputation has been completely successful." "And I warned him, oh! so carefully, to let toy cannons alone. Doesn't it look like a judgment on my poor boy?" "It does look like a judgment, certainly; and yet such things sometimes prove to be blessings in disguise. It is not for us to repine. One hundred dollars, madam. Thanks."

OBITUARY.

JOHN HENRY SMALTZ, M.D.

John Henry Smaltz, M.D., of Philadelphia, died September 22. He was born in Philadelphia in 1827, and was graduated from the College Department University of Pennsylvania in 1846. In 1849 he received the degree of Master of Arts, and in the following year was graduated from the Medical Department of the University. He was a member of the Northern Medical Society, the County Medical Society, the Pennsylvania State Society and the American Medical Association.

THE

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COMMUNICATIONS.

NOTES OF A CASE OF FILARIA MEDINENSIS.[1]

BY ARTHUR VAN HARLINGEN, M.D.,
PHILADELPHIA.

X., an *employeé* in the Custom House at Philadelphia was referred to me by Prof. D. Hayes Agnew on the 17th of January last.

The patient a man of 47 had never lived out of Philadelphia. He was accustomed to opening and examining invoices from all parts of the world, including the Orange Free State, but did not come in contact with any foreign goods. His health had always been good, and he had never suffered from any disease of the skin.

Some time in September last (four months previously) the patient first noticed a small red papule under the skin of the back of the hand. The lesion gave rise to considerable pruritus but no pain. It soon assumed an elongate form and began to develop at one end, taking on a serpentine form and pushing along under the skin throwing the epidermis up into a ridge, and showing beneath it like a sinuous red cord.

The worm, for such it appeared to be, progressed slowly over the back of the hand between the index and the middle finger and down across the palm, in which position it was when the patient consulted me.

The worm then presented the appearance of a deep red sinuous cord situated just beneath the skin, which was slightly elevated above it, five to six inches in length and about an eighth of an inch in breadth. The head of the parasite appeared to be near the radial side and just turning from the palm to the back of the hand.

There was little or no abnormal sensation due to the presence of the worm. Occasional attacks of itching were experienced, and when the patient washed his hands there was a good deal of burning in the palm.

Concluding from the appearances presented that I had to deal with a case of *Filaria Medinensis*, I cut down upon the parasite, hoping to demonstrate its presence and perhaps to remove it in the usual way by firm continued traction. For some reason or another, probably awkwardness, I failed to find the parasite on two successive occasions, and as it was making perceptible progress toward the back of the hand and as I feared that if irritated it might descend to deeper lying tissues and give rise to more serious trouble, I determined to employ the means which Horton terms the radical cure and which was also used successfully by Tilbury Fox, namely, the internal administration of asafœtida.

The patient was ordered to take three 3-grain pills four times a day, or thirty-six grains of asafœtida daily. After four days treatment the patient returned in a marvelously improved condition. The red, elevated, cord-like lesion wandering irregularly over the palm had given place to a withered brown trace, level with the skin or slightly depressed and totally without sensation, even when rubbed.

On the side of the hand, however, a portion about an inch in length retained somewhat the old appearance. It had turned

[1] Read before the American Dermatological Association, at the Twelfth Annual Meeting, Washington, D. C., September 19, 1888.

and bent downward toward the joint of the wrist.

The asafœtida was increased to forty-eight grains daily, and at the patient's next visit, five days later, only a trace of the original red line could be seen near the head of the parasite, all the rest was represented by a brown withered line.

I have not seen the patient since, but have been informed by Prof. Agnew that he has been and remains well, without further trouble from the dracunculus.

I have been led to report this case because it is an instance of a purely tropical or subtropical affection occurring in a temperate climate, and also because of the rapidity and certainty of the cure. So far as I am aware, but two cases of Filaria Medinensis have been recorded as occurring in this country in persons who have not been in tropical regions. One of these was reported by Surgeon Jarvis U.S.A., in the *Virginia Medical Monthly* for May, 1857, the other by Dr. N. S. Walker, of Georgia, in the *Southern Medical and Surgical Journal*, vol. 13, N. S., 1857, p. 463. The first of these occurred on the instep of an adult, and the worm was extracted by the knife. The second occurred in an infant three months of age, and was cured by repeated transverse incisions. The other cases reported in American journals have been those of persons returning from tropical climates. Occasionally, the Filaria Medinensis has been confounded with the Filaria Sanguinis hominis, that parasite which is conveyed by its intermediate host the mosquito, and which gives rise to chyluria, elephantiasis, etc.

The method of propagation of the Filaria Medinensis is unknown. It was formerly believed to be contracted by bathing in tanks where the minute Filaria swarm, or by walking barefoot in the mud. This view has been supported by the fact that the greater number, in fact almost all cases occur about the feet. But such a mode of penetration is unlikely and not in accordance with our knowledge of the mode of propagation of other parasites of a similar kind. The other theories are: First, that the worm is swallowed in drinking water directly; second, that it is swallowed in the body of an intermediate host, some minute aquatic crustacean. No adequate demonstration of the mode of propagation or of the invasion of the parasite has as yet been brought forward, and we must, for the present, confess our ignorance in this matter.

The description of the clinical appearances presented by the Filaria Medinensis in our text books is, I think, inadequate. Too much stress is laid upon the furuncle or abscess-like lesion in which the worm is found coiled, or from the bottom of which it protrudes. In many cases reported in the journals, on the other hand, it will be found that the whip-cord-like sinuous red line under the skin is the most prominent symptom, and also that there may be a number of these marks.

The treatment recommended for Filaria Medinensis is almost invariably that employed by the natives of those countries where this parasite abounds. It consists in cutting down upon the worm and withdrawing it by gradual and continued traction. Should the worm, which, it must be remembered, is a pregnant female teeming with myriads of living young, break, it is said that the young worms escape into the surrounding tissues and give rise to violent irritation and inflammation, occasionally fatal in its result. But this is by no means invariably the case. In one of the cases cited above, repeated section of the worm, even in an infant three months of age, was followed by no evil consequences, and, in fact, led to the cure of the disease. Injections of carbolic acid have been recommended by some authorities, and had been used in the case of my patient before he came under my care, but without a very satisfactory result. Electricity has been recommended, but I have not been able to find any case reported in which it has been employed. As regards internal treatment, two remedies have been employed with striking success. Martin, in a severe case, where there were a great number of the parasites in various parts of the body, obtained a very speedy cure by the administration of moderate doses of iodide of potassium. Dr. Horton (*Guinea worm or Dracunculus*, by Jas. A. B. Horton, London, 1868) used the tincture of asafœtida in thirty-drop doses three times a day, with "almost magical" effect in a number of cases. The drug seems to kill the parasite and its young almost immediately, and absorption takes place without any disturbance to the patient's system. The late Tilbury Fox employed asafœtida with success in one case, but I have not heard of its use by any one else. In the case I have reported, the effect of the drug was so striking that I think it should be enrolled among the list of remedies against Filaria Medinensis, and employed in preference to the surgical treatment.

CASES OF DISEASE OF THE APPENDIX AND CÆCUM.

BY WILLIAM OSLER, M.D.,
PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF PENNSYLVANIA.

I have recently had occasion to look over my notes of cases of disease of the cæcum and appendix, and the following records illustrate the anatomy of some of the commoner affections of these parts:

ANOMALIES OF POSITION.—The appendix is extremely variable in position and may be found very far from the right iliac fossa. I have seen it in every region except the left hypochondriac and the left lumbar.

Case I.—Phthisis. Cæcum, appendix, and the first parts of the ascending colon unattached. The cæcum with a short appendix was turned up and lay in close contact with the gall-bladder, separating it together with the edge of the liver from the right costal margin. There were no adhesions; it could readily be replaced.

Case II.—Cirrhosis of liver. Man, aged 31. The appendix passes behind the cæcum and is adherent on the peritoneum covering the right kidney. There had been an old localized peritonitis.

Case III.—Pneumonia. Woman, aged 40. Appendix long and descends into the pelvis, where it is firmly attached to the broad ligament, near the ovary, forming a noose, about an inch in diameter.

Case IV.—Male, aged 68. Old peritoneal bands join several of the coils of intestine together. The cæcum and appendix with the ascending colon are drawn up and to the left, the cæcum folded on the colon, and the valve and appendix occupy a position corresponding to a point 1½ inches below and a little to the right of the navel.

Case V.—Typhoid fever; perforation. Woman, aged 25. A long appendix passes vertically down into the pelvis and is attached to the wall of the pelvis not far from the ovary.

I dissected two cases recently, at the Philadelphia Hospital, in one of which the appendix was adherent to the ovary, and in the other to the broad ligament.

Case VI.—Appendix very long, passes behind the cæcum and ascending colon, and the lower end of the right kidney, reaching almost to the pelvis of that organ.

Case VII.—Typhoid fever. "In removal of intestines the appendix is found to occupy a very unusual position. It passes behind the cæcum and ascending colon, along the anterior surface of the kidney, close to the hilus, and its apex is in close proximity to the under surface of the right lobe of the liver, being distant 1½ inches by measurement from the gall-bladder."

ULCERATION.—This is a not uncommon lesion in phthisis and typhoid fever. No doubt the following list would have been greatly increased had a more systematic examination been made of the appendices in all cases.

Case I.—Girl. Phthisis—pneumothorax. Ulcers in cæcum; appendix dilated; mucosa extensively ulcerated.

Case II.—Phthisis. Male, aged 18. Much recent swelling and ulceration of Peyer's glands in ileum. The appendix large, the mucous membrane swollen, congested; it presented one small ulcer. There were three oval fæcal concretions in the tube.

Case III.—Typhoid fever. Girl, aged 17. Many ulcers of ileum, and small ones in cæcum. Several small ulcers at, and just within, the entrance of the appendix, the mucosa of which was greatly swollen.

Case IV.—Man, dead of typhoid fever. Extensive ulceration of cæcum. "In appendix vermiformis, mucosa at distal end much swollen, and there is an ulcer the size of a five-cent piece with the slough still adherent."

Case V.—Phthisis. Woman, aged 29. No ulcers in ileum, cæcum, or colon. Appendix large, swollen, and unattached. It contains soft fæces, and half an inch from the end there is an irregular ulcer the size of a five-cent piece.

Case VI.—Phthisis. Woman, aged 19. Ulcers in ileum and one in cæcum at valve. Appendix dilated and large, particularly the distal end. When slit open, mucous membrane swollen. Two tuberculous ulcers at the extremity.

Case VII.—Phthisis. Male, aged 36. Ulcers in ileum, cæcum (very extensive), and colon. Appendix large and thick, adherent on iliac fascia. Several ulcers, and at its extremity a small localized abscess the size of a walnut, due to perforation of one of the ulcers.

Case VIII.—Ann W., aged 22; typhoid fever. Cæcum lies in pelvis, no attachment; the peritoneum covers it completely; the appendix ascends from tip of cæcum to the margin of the pelvis and ends in a fibrous cord just under the meso-colon. Much ulceration in cæcum; in appendix several ulcers with adherent sloughs; mucous membrane much swollen.

Case IX.—Ellen R., aged 16; phthisis. Extensive ulceration in ileum and cæcum; appendix swollen; mucous membrane tumid and extensively ulcerated.

Case X.—Male, aged 28; typhoid fever. No ulcers in the cæcum. In the appendix, which is long, the mucous membrane is swollen, and there are two ulcers with adherent yellow sloughs.

Case XI.—Male, aged 35; phthisis; University Hospital, 1886. Ulcers in cæcum and ileum; appendix swollen, and presents two tuberculous ulcers.

Obliteration of the Lumen of the Appendix.—This may be partial or complete, and is more frequent, I think, than the scanty number of cases in my records would indicate. When complete, it may be regarded as advantageous, but obliteration of the cæcal end is a serious danger, as many cases of inflammation and perforation result from the retention of secretion and dilatation. The distended tube may be as thick as the thumb, or even as large as a sausage.

Case I.—Typhoid fever; man, aged 29. Tube of appendix partially obliterated.

Case II.—Typhoid fever; male, aged 40. Appendix obliterated for half an inch of its cæcal end; dilated in the distal part, one inch in length.

Case III.—Male, aged 33; dead of phthisis. The appendix vermiformis obliterated and represented by a firm fibrous cord, one and a half inches in length. There was no special thickening or adhesions in the neighborhood.

Case IV.—Woman; death from a large burn. "Appendix is small, and the lumen completely obliterated."

Foreign Bodies.—I have never met with a foreign body in the appendix; but I was once brought four or five apple pips which had been removed from the tube in a subject in the McGill College dissecting-room, and Dr. William Sutherland, while acting as Pathologist during my absence in 1884, has recorded a case in which six or eight snipe-shot were found in the appendix of a man dead of Bright's disease.

Moulds of fæces are not uncommon, shaped like a date-seed. Sometimes these form concretions and may cause ulceration. It is rather surprising, considering the situation of the appendix, that we do not more often find foreign bodies in it.

Perforation with Perityphlitic Abscess.—*Case I.*—J. B. N., aged 20, admitted October 4, with peritonitis. Notes not available. Death on the 8th. Body well developed. In abdomen, omentum is glued to the anterior wall, and beneath it much creamy pus. The tip of the omentum is closely adherent in the neighborhood of the right internal ring, and here the coils of intestines are matted together. There is general peritonitis and an unusual quantity of thick pus. The ileum, carefully removed and slit open, shows no disease of the mucosa. It contained numerous hard dry fæcal masses. The cæcum looked normal, was placed low, and adhered to the iliac fascia. The mucous membrane was not ulcerated. The appendix passed down toward the internal ring, and adhered closely, covered by the omentum. A probe passed into it enters directly a small abscess near the ring. Slit open, a perforation is seen near the end, on the under side, which leads into the abscess. There was no foreign body.

Case II.—C., male, aged 28, patient of Dr. George Ross, in 1882. Sudden acute pain in right iliac fossa, with great tenderness and high fever. After leeching, the pain subsided, and for several days the condition improved. Then he had a chill, with increased fever. Most careful exploration of the affected region failed to determine any fulness, fluctuation, or signs of localized tumor, and yet it was clear that the patient had a septic process from some acute abdominal affection. Several consultations were held with a view of operation, but the absence of local symptoms determined against it. He had repeated chills, and death occurred from septicæmia. At the autopsy, two quarts of turbid fluid in peritoneum; intestines covered with recent lymph and matted together. The transverse colon was adherent to the ileum, two inches from the valve. About the cæcum the parts looked natural, except at the inner margin, where there was considerable pigmentation. The cæcum itself was normal. On slitting open the appendix, the mucosa for half an inch was healthy; the remainder of the tube was dilated and presented two perforations, the larger of which was the size of a five-cent piece, and communicated with an abscess situated in the angle between the cæcum and ileum, and was partly covered by both these structures. The sac of the abscess, which had the size of a small apple, was closed; had thick dark walls, and contained two ounces of creamy pus. There was an extensive abscess of the mesentery, with suppurative phlebitis of the veins. The portal vein and its branches contained dark greenish-yellow pus. The orifice of the splenic vein was closed with a thrombus.

Case III.—I. L., aged 42. Had typhoid fever, from which he never recovered completely; septic symptoms developed, signs of pleurisy, and finally acute general peritonitis. Duration of illness, three months.

Autopsy. — General peritonitis; eighty ounces of turbid exudation; much lymph on the intestinal coils. The appendix passed out at right angles to the cæcum and lay directly upon the promontory of the sacrum. It had about the length and size of the index finger, and was much swollen and soft. The cæcum was normal; proximal end of appendix closed; a probe passed a couple of lines beneath the mucous membrane, and then met with a firm obstruction. Beyond this the tube of the appendix was dilated, and, when opened, showed a perforation one-third of an inch in diameter, which communicated with a small localized abscess cavity on the promontory of the sacrum. No foreign body; no concretion; extensive abscess of mesentery; liver enlarged; portal vein and branches distended with pus; empyema of left pleura.

Case IV.—J. P., aged 26, patient of Dr. F. W. Campbell. Inflammation of cæcum in July, from which he partially recovered. Recurrence in September: pain in abdomen and local symptoms; then chills and sweats. Death suddenly, October 10.

Autopsy.—Body emaciated. Slight peritonitis. Intestines very dark-colored. Cæcum healthy. Orifice of appendix closed and the tube obliterated for a quarter of an inch; distal portion dilated. On the upper surface, which was covered by peritoneum, there was a localized slough, not extending through the coats. The mucous membrane of the tube was dark-colored and swollen, but not ulcerated. Extensive abscess of mesentery, chiefly in the mesenteric veins. The suppuration extends into the gastric and portal veins, the branches of which on the liver were dilated and full of a creamy greenish-yellow pus.

Case V.—The following case illustrated a most unusual mode of termination, viz., hemorrhage from the bowels:

Male, aged 45. Had a "bilious attack" in February, lasting three weeks. Fourteen months later, another attack—vomiting, flatulence, and constipation; very slight abdominal pains. The motions became offensive, there was irregular fever, and he began to lose flesh. Suddenly, one morning, he passed a large amount of blood in the bed, and the hemorrhage recurred through the day and proved fatal the same evening. The autopsy showed a smooth peritoneum. The lower coils of the ileum were matted together on the promontory of the sacrum, upon which lay a large flat abscess. The cæcum and colon were normal. The appendix passed out at right angles and was attached to the abscess on the sacrum, with which it communicated by two openings at the apex of the tube. There were two perforations from the abscess cavity into the ileum. The hemorrhage had evidently come from this part, but the precise locality could not be determined.

Case VI.—Patient aged 50; was the subject of right inguinal hernia, and on Sunday evening, February 27, was seized suddenly with intense pain in the lower abdominal region. He vomited, and the next day the abdomen was swollen. The pain persisted. On Wednesday he had diarrhœa, and the pain continued to be very severe. On Friday, when admitted to hospital, the belly was tympanitic, vomiting very urgent, and the pain severe. He refused surgical interference, and died on Saturday night. At the autopsy, the cæcum was found adherent to the iliac fascia and passed into the ring, and was attached for at least two inches to the wall of the canal. The ileum was normal, and the finger passed freely through the valve. On searching for the appendix, the proximal orifice was found at the extreme end of the hernia of the cæcum, in the inguinal canal. It then curved upon itself, passed back into the abdomen immediately behind the terminal portion of the ileum, crossed to the left and became adherent to the wall of an abscess cavity lying to the right of the promontory of the sacrum. The lumen of the tube was free; the terminal three-fourths of an inch had sloughed and communicated directly with a small circumscribed abscess-sac with pigmented and indurated walls. This opened into a larger pus-cavity, bounded by the mesentery and ileum in front, and the sigmoid flexure and peritoneum behind.

Perityphlitis from Cæcal Disease.—The following cases of round ulcer of the cæcum are of interest, as the condition is not common:

Case I.—M. G., aged 19, a well-built young man, was in hospital for four days with symptoms of peritonitis; at first it was thought to be obstruction. Three weeks previously he had had an attack of what was supposed to be internal strangulation, from which he recovered.

The autopsy showed recent peritonitis, most intense in the right iliac fossa. There were evidences of bygone peritonitis in the form of opacities and puckering on the serous surfaces. The cæcum was adherent closely to the iliac fascia. When opened *in situ*, an ulcer was seen on the outer wall, and a large perforation over an inch in diameter, leading into a localized abscess in the iliac fossa. The peritonitis had evidently started at this point, though there was no sign of rupture of the abscess. The appendix was normal. It seems probable that in the first illness, three weeks before the fatal attack, the perforation occurred, with the formation of the localized abscess.

Case II.—I. T., aged 38, patient of Dr. Armstrong. Symptoms at first were those of perityphlitis. A septic condition supervened, lasting 15 days; repeated chills. There was dulness in the right lumbar region, due, it was thought, to a tumor of some sort; but on aspiration a clear fluid was obtained.

Autopsy.—Body much emaciated. No tumor or fulness to be felt either in the right iliac fossa or in the lumbar region. In abdomen, intestines very dark-colored; two coils of ileum adherent to the cæcum; two pints of turbid serum in the peritoneum. The cæcum closely adherent by its posterior wall; tissues about it dark, and look thickened. Between the caput cæci and the psoas muscle, lying thus to the inner side of the bowel, was an abscess cavity the size of a small apple, its walls rough, irregular, and shreddy. It contained only a small quantity of a thin sanious pus. The colon and cæcum were opened *in situ*. On the posterior wall of cæcum, was a dark-colored area, in the centre of which was an ulcer the size of a ten-cent piece, which communicated with the abscess cavity by a perforation which would admit a quill. The appendix was unaffected. There was a small ulcer on the lowermost Peyer's patch of the ileum.

Tuberculous and cancerous disease of the cæcum not infrequently lead to perforation and extensive suppuration in contiguous parts, as illustrated by the following case:

Case III.—Middle-aged man. Ill for some months; symptoms of obstruction, and latterly of septic poisoning.

Autopsy.—In abdomen, the cæcum and appendix were seen to be large and distended, and the bowel is constricted just above the entrance of the ileum. The colon and cæcum opened *in situ*. A stricture, with thick hard walls, involved the first two inches of the ascending colon, and just admitted the tip of the little finger; when cut through, the appearance of the mucous surface is that of an open cancerous ulcer. At the posterior wall, this has perforated and communicates with a large abscess by an orifice admitting the index finger. The abscess extends behind the psoas muscle, and has eroded a lateral process of one of the lumbar vertebræ; above, it extends for a short distance behind the kidney; and externally it reaches the crest of the ilium. The appendix was not involved.

CLIMATE AND BRIGHT'S DISEASE.[1]

BY J. C. WILSON, M.D.,

CLINICAL LECTURER ON DISEASES OF THE KIDNEYS AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

The relation of climate to Bright's disease is twofold, causative and therapeutic.

All authorities are of accord as to the part played by cold and damp, and especially by sudden cold and damp, in the production of acute nephritis. The causal influence of vicissitudes of weather, and therefore of cold, damp, and changeable climates on the production of the sub-acute and chronic forms of nephritis, is less obvious. Bright's disease is peculiarly an affection of temperate climates, but when we take into consideration the importance properly assigned to modes of life, occupation, diet, alcohol, nervous influences, heredity gout, and lead in its causation, we cannot but be impressed with the long recognized fact that in whichever direction we leave the temperate zone we find a decided and rapid diminution in the frequency of this disease.

Hirsch calls attention to the infrequency of albuminuria in sub-tropical and in extreme northern countries. Dickinson, who has carefully investigated the subject, fully confirms this view from an analysis of the statistics of the British Army Medical Reports for eight years from 1865 to 1872 inclusive. These statistics are of peculiar value, as they represent the frequency of renal affections in bodies of soldiery in every climate and at every season during the same period of time. The observations are drawn from considerable numbers of individuals of the same race, age, occupation, and habits, living under nearly similar conditions, under the

[1] Read before the American Climatological Association, at Washington, D. C., September 20, 1888.

observation of trained observers and with a uniform system of recording facts. They are perhaps vitiated to a certain extent by the effort which has been made to secure accuracy by eliminating from the conclusions the influence of syphilis. Dickinson found that in British America, with its low average and great variability of temperature, renal disorders are nearly as frequent as in the United Kingdom. In Newfoundland, with its exceptionally humid climate, these disorders, so far as regards the limited number of troops there stationed, appear to be even more common than in the British Isles. With the higher temperature of New Zealand, renal disease becomes less frequent, and is least so on the sub-tropical shores and islands of the Mediterranean, and in the solitary out-posts of Mauritius and Bermuda, where a tropical or nearly tropical climate is tempered by a vast circumference of ocean. It is to be noted also that the Cape of Good Hope and St. Helena were comparatively free from renal affections. This accomplished observer also informs us that as the result of an analysis of the published registers of the causes of death, the comparatively cold cities of Great Britain and Australia show a remarkable liability to renal diseases. Paris, though not differing very much in temperature from the more fortunately situated of these cities, has a smaller proportion. Genoa, with its subtropical climate, has an almost complete exemption. He found that in the year 1863, in England one death in 106 was due to this cause; in Scotland, one in 109; in Wales, one in 131. Of the several divisions of Scotland, in the mainland rural districts one death in 103, in the towns one death in 112, and in the insular rural districts one death in 188.

The Shetland Islands, with an almost arctic climate, enjoy an immunity from the disease not approached by any other part of the kingdom. It is further noted that within the limits of each kingdom, especially in Scotland, where the climatic differences are much more marked, there is a striking general correspondence between the amount of renal disease and the changeability of the climate. He found that in the Southern hemisphere exposure to a similar climate is attended with the same results. In Melbourne, with a mean temperature of 57°, renal affections are scarcely less common than in London. This appears from the results of general registration, while the mortality from kidney disease in the Melbourne City Hospital, one in thirteen, is much what occurs in similar institutions in England.

On passing the mean of 60° F., the frequency of renal disease displays an extraordinary diminution. "Renal diseases, putting aside that of lardaceous origin, are the compatriot of wheat and barley rather than of the vine and the olive. They abound wherever the climate, however cold during the winter, is warm enough in the summer, as in Canada, to bring wheat to perfection, and become scarce where oranges and lemons grow, and where deciduous trees as generally characteristic of the scenery, are replaced by palms and other tropical endogens. In other words, it prevails wherever the heat for a considerable portion of the year is what would ordinarily be called temperate, whether usually so, as in Great Britain, or so for a large period of the year, as in British North America, where comparatively mild weather divides the year with continuous frost."

Dr. Dickinson's researches further show that with tropical heat, renal disease increases. They also confirm the opinion generally entertained, that the prevalence of these affections is promoted by frequent and abrupt changes. On the western coast of Scotland where there is scarcely heat enough in summer to ripen wheat, but where the winters are warm from the influence of the Gulf Stream, so that a very uniform temperature prevails throughout the year, "renal disease is not half so frequent as on the eastern side of the kingdom, where the weather is both clearer and healthier than on the Atlantic shore, but undergoes much larger and more frequent variations."

The records on which these conclusions are based do not permit of a distinction between the acute inflammatory affections of the kidney and the more insidious and chronic forms of Bright's disease.

I am not aware that similar investigations on a large scale have been made in this country. Without doubt an analysis of the records of the great life insurance companies as regards the proportion of applicants rejected on account of Bright's disease and of deaths due to this cause, would shed much light not only upon the influence of climate, city and rural life, occupation and other important factors in the causation of this disease, but would also yield important facts in regard to the duration of the disease under varying circumstances.

Experience has abundantly proved that climate exerts an influence upon the course and duration of chronic forms of Bright's

disease, scarcely less important than in its causation. The concurrent testimony of all observers who have given their attention to the subject of the climate treatment of Bright's disease, points to the salutary influence of prolonged residence in favorable sub-tropical regions, especially in cases where the disease has not yet made much progress. The late Professor Flint laid great stress upon the importance of a change of climate in chronic Bright's disease. You, yourself, Mr. President,[1] have in your lectures and published writings emphasized it. Tyson and Purdy dwell upon it with a positiveness not found in the earlier writers. Dr. Dickinson goes so far as to say that "the advantage to be expected from a change of sky is at least as great in renal as in pulmonary disease. Cure is a word to be used with caution but I have seen little less, the albumen reduced to a trace, and perhaps that inconstant, and the general health brought up almost to its original level." Dr. George Johnson writes: "Among other remedial agencies, when acute renal disease is prolonged and threatens to become chronic, change of air and scene is often highly beneficial. Residence during the winter season in a warm, dry, equable climate, such as may be found at Cannes, Nice, Mentone and Algiers, has in many instances, been attended with highly beneficial results. The bright warm sun and dry invigorating air favor the action of the skin and of the bronchial mucous membrane; the patient is able to be much in the open air and thus the respiratory, the digestive and the secretory functions are all assisted and promoted. I have seen some most remarkable recoveries effected under the influence of a long voyage after other means had failed to effect a cure."

On the other hand, the climate treatment of Bright's disease seems to have been strangely overlooked by teachers of influence and authority. No reference is made to it in Bartel's article in Ziemssen's Encyclopædia, nor in that of Delafield in Pepper's System, nor in that of Grainger Stewart in Quain's dictionary, recent works of reference on the shelves of practitioners; while in the text-books in the hands of medical students, references to the influence of climate in the causation and treatment of Bright's disease are rare and brief.

The most desirable climates are those which combine the attributes of evenness, dryness, and warmth, with a mean range of temperature between 60° and 65°. On the North American continent, a number of stations in the southern interior meet these indications. Among these are Thomasville and Tallahassee. The stations in the interior and on the Gulf coast of Florida are well suited to this class of patients. Southern California has several suitable stations. Nassau and Bermuda are also to be recommended. The stations on the Mediterranean coast offer especial advantages as winter resorts for patients suffering from chronic Bright's disease, while Algiers, Cairo, and the Cape of Good Hope, are also favorably spoken of.

This paper would have occupied your considerate attention to little purpose, however, had it contained nothing beyond the familiar facts already mentioned. In availing ourselves of the advantages of the climate treatment of Bright's disease, we must not overlook the dangers of abrupt changes of climate and of the vicissitudes of travel in patients in whom the disease has already made some progress. It is with the view of eliciting discussion and obtaining the results of the experience of my colleagues in this Association that I submit certain conclusions drawn from my own experience; and, with the view of saving time, I venture to embody them in the form of the following propositions:

1. The best results of climate treatment in Bright's disease, as in phthisis, are obtained in the early stages of the affection, and by continuous residence. After the general health has become seriously impaired, an amelioration of the symptoms is all that can be hoped for. Alternations of climate, especially those necessitating long and fatiguing journeys by rail are attended with the danger of uræmia.

2. High altitude climates, even when presenting the conditions otherwise favorable, are unsuitable for this class of patients. Uræmic attacks and cardiac failure not infrequently shortly follow change of residence from low to high altitudes—differences of three thousand feet or more.

3. The conditions of North Atlantic steamship travel are often highly unfavorable to those suffering from advanced Bright's disease; especially is severe and prolonged sea-sickness liable, in these cases, to terminate in fatal uræmia.

[1] Professor Loomis.

—At a meeting of physicians and others in Louisville, Ky., called by the Mayor, it was decided to open the gates of Louisville to yellow fever refugees. A train arrived on Sept. 22, with 135 from Decatur.

Society Reports.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

FIRST TRIENNIAL MEETING, AT WASHINGTON, SEPTEMBER 18, 19 AND 20, 1888.

First Session, Tuesday, September 18.

Meeting for Organization.

The meeting was called to order at 1 P.M. by Dr. William Pepper, Chairman of the Executive Committe, who spoke as follows:

On behalf of the Executive Committee I have to announce the manner in which we have discharged our responsible duty. The present meeting is the result of prolonged deliberation which began to take shape more than four years ago, before the attention of the medical profession became occupied with preparations of the meeting of the International Medical Congress, but all action was deferred in order that there should not be the semblance of interference with that important meeting. This delay has served to render more conspicuous the necessity for this organization.

In order to produce the best scientific results, it is essential that the numbers in attendance shall be reasonably limited and that as far as possible the same men shall attend successive meetings, securing a continuity of intellectual life and activity. A large proportion of those interested in the development of such an organization are, as I am myself, warmly attached to the American Medical Association, and determined to exert their influence to maintain and promote the success of this great national organization.

Your committee ventures to hope that their provisions will meet the unanimous approval of the Congress. We have recommended that the sessions shall be triennial. We have jealously guarded against the admission of parliamentary business into the Congress, the functions of which are designed to be absolutely and exclusively scientific. We have also guarded the independent sovereingty of each participating society.

Lastly, the Executive Committee has reached the conclusion that the selection of the President of each Congress shall be entrusted to the Executive Committee then in office.

Close study of the conditions of this Congress has led the Committee to feel that if this organization were to have the effect of favoring the multiplication and subdivision of special societies, it would be nothing less than a calamity. We have therefore provided that the admission of new associations shall be secured only by the unanimous vote of the Executive Committee.

It remains only to add that in exerting the privilege of selecting a President for the first Congress of American Physicians and Surgeons, we feel that we have been guided to the choice of a man, whose admirable personal character, whose high attainments, and whose illustrious services in the cause of literature, of science, and of the entire medical profession, mark him as entitled to this great honor and distinction.

It gives us therefore the utmost gratification to present to you our President, Dr. John Shaw Billings, and to announce that the Congress of American Physicians and Surgeons is now duly organized.

President Dr. J. S. Billings then took the chair and responded in a brief address.

The

Address of Welcome

was delivered by Dr. Samuel C. Busey of Washington.

The consideration of the By Laws was next taken up.

By Laws.

1. This organization shall be known as the Congress of American Physicians and Surgeons.

2. It shall be composed of National Associations for the promotion of medical and allied sciences.

3. It shall hold its sessions triennially in the city of Washington, D. C.

4. The officers of the Congress shall be a President, Vice-Presidents, a Secretary, a Treasurer and an Executive Committee.

5. The President shall be elected by the Executive Committee of which he shall be ex-officio be a member. He shall preside at the sessions of the Congress. He shall deliver an address.

6. The Presidents of the participating societies shall be ex-officio the Vice-Presidents of the Congress.

7. The Secretary and Treasurer shall be elected by the Executive Committee. They shall be ex-officio members of the Executive Committee.

8. The Executive Committee shall be composed of one member from each participating society; and said members shall be elected by the various societies at the next annual meetings subsequent to the Congress.

It shall be charged with all duties pertaining to the organization of and preparation for the ensuing Congress, including the election of all officers and of a Committee of Arrangements.

It shall superintend the publication of the Transactions of the Congress.

9. The expenses of the Congress shall be divided between the participating societies in proportion to their membership.

10. The admission of new associations to participation in the Congress shall be by unanimous vote of the Executive Committee.

These by laws were unanimously adopted. Adjourned.

General Session, Tuesday Evening, Sept. 18.

Dr. Reginald H. Fitz, of Boston, read a paper on

The Medical Relations of Acute Intestinal Obstruction.

The subject of this paper was the diagnosis and medical treatment of the acute internal, mechanical varieties of intestinal obstruction. The only causes recognized were strangulation from adhesions, vitelline remains, peritoneal slits, pockets, and rings; intussusception, twists, and knots; abnormal contents, strictures, and tumors. The evidence presented resulted from an analysis of 295 cases collected from medical literature since 1880.

The most constant symptoms of obstruction were shown to be pain, vomiting, tympany, and tumor. Stoppage of the bowel he did not regard as the most essential symptom in diagnosis, since frequent loose stools characterize intussusception, and may also occur in other varieties of obstruction. Too much attention directed to this symptom, he said, leads to erroneous diagnosis. Stoppage of the bowel is of frequent occurrence in peritonitis, and the opinion that it indicates obstruction often results in irrational and injurious treatment. The physician is called upon to decide whether a given case is one of acute obstruction or not; then to determine its seat and its cause; and finally, to decide what is to be done. The evidence offered by Dr. Fitz showed that the diagnosis is to be made by excluding the various causes of peritonitis. Its seat in the large or small intestine is to be determined by injections, under high pressure, when necessary. The variety is, for most practical purposes, an intussusception; or a twist of the large intestine and strangulation; or gall stones in the small intestine. The differential diagnosis depends on the relative frequency of these varieties, the age of the patient, the antecedent and immediate symptoms.

The treatment consisted, he said, in the attempt to relieve intussusception of the large intestine by forced injection under anæsthesia, combined with the use of massage; and in treating obstructing gall stones with opium, possibly with the aid of laxatives and electricity. All the other varieties of acute obstruction require surgical treatment. The latter treatment is also necessary on or before the third day in cases of intussusception not yielding to forced injections, and in cases of gall stones when the symptoms become urgent.

Dr. N. Senn, of Milwaukee, read a paper on

The Surgical Treatment of Intestinal Obstruction.

Dr. Senn asserted at the very beginning of his paper that all cases of true intestinal obstruction are, in every sense of the word, surgical cases. Intestinal obstruction is present when, from mechanical or dynamic causes, the intestinal canal becomes completely or partly occluded, interfering correspondingly with fecal circulation. It is important that a distinction be made between obstruction due to mechanical causes and that due to dynamic causes. In the former case the surgeon should modify the mechanical cause; in the other, the surgical treatment is limited to diminishing intra-abdominal pressure. Cases of internal intestinal obstruction should be considered in the same light as cases of strangulated hernia. The time that such a case may safely be permitted to go without operation varies. In some, twenty-four hours will suffice for the occurrence of irreparable pathological changes; in others, a much longer time may be allowed to elapse. Operation should be performed as soon as the diagnosis is made.

The surgical resources in the treatment of internal obstruction were taken up seriatim. *Irrigation of the stomach* was first referred to. All forms of intestinal obstruction, no matter what the cause may be, are aggravated by anything that increases the pressure on the proximal side of the obstruction. Irrigation of the stomach relieves this and also diminishes the intra-abdominal pressure. It not only empties the stomach, but also evacuates the contents of a number of feet of the intestine. It will not do, however, to rely upon this as a radical measure, except when the cause of obstruction is of a temporary char-

acter. This measure should always be carried out before a cutting operation, as it prevents vomiting. An antiseptic solution should be used in the irrigation.

Distension of the intestine. The mechanical effects of this measure—distension with a fluid—he said, are limited to the colon. The fluid does not pass beyond the ileo-cæcal valve. Why should we not, in these cases, resort to the lightest possible substance known—hydrogen gas—which is harmless, readily obtained, and aseptic? A pressure of from one-fourth to two pounds to the square inch overcomes the resistance of the ileo-cæcal valve, and forces the gas from the anus to the mouth. A pressure of eight to ten pounds to the square inch is required to produce palpable injury to any of the coats of the intestine. If perforation takes place there is at once a positive indication for opening the abdomen. The fact that perforation has occurred is shown by the disappearance of the liver dulness.

Manual exploration by the rectum is a useful diagnostic and therapeutic measure when the obstruction is below the sigmoid flexure, provided the surgeon has a small hand.

Taxis and massage should be limited to cases in which the obstruction is due to intra-mural causes, and to a few cases of invagination. Uniform, uninterrupted equable *pressure of the abdomen* is useful in preventing hyper-distension in these cases, especially where dynamic causes are feared.

Enterotomy, so frequently practiced in the past, he said he hoped had become very nearly obsolete. It should be employed only where it is clear that the patient will not be able to pass through the ordeal of laparotomy.

Lumbar colotomy. In cases in which this operation was formerly employed, we can often avoid the necessity for colotomy by uniting the portion of bowel above the obstruction with that below by means of decalcified bone plates. Dr. Senn said he had specimens showing that a dilated congested bowel can be repaired when excluded from the fecal circulation in this way.

He also said he had, in the past eight months, performed gastro-enterostomy in four cases by this method. In all of these cases the operation was a success, although in one case the patient died because the operation had been postponed too long. In one case the advice of Leucke had been followed, and the first presenting portion of the bowel had been fastened to the stomach. The patient continued in good condition for nine days, when symptoms of obstruction came on, and he died in three weeks. It was found that the connection with the bowel was eight feet below the pyloric orifice, and that the movements of the bowel had produced a sharp flexion of the intestine, causing obstruction. Gastro-enterostomy in incurable carcinoma is a safe operation, and one which the surgeon owes to all such patients.

In opening the discussion, Dr. Arthur Durham, of London, said that he had taken much interest in this subject. There is no class of cases which is more serious or more dangerous than that of intestinal obstruction. He agrees with Dr. Senn, that usually the sooner the surgeon is called in these cases the better. As soon as the diagnosis is made, the operation should be performed. In some cases it should be done before a positive diagnosis is reached, and in order to clear up the diagnosis. Under such circumstances, the surgeon must be prepared to meet the indications that present themselves. In trying to reach a diagnosis, the probabilities in favor of this or that condition, based upon statistics, should not influence us; but the case should be studied on its own merits, and treated as its indications may demand. In regard to the injection of hydrogen gas, Dr. Durham suggested the possibility of the formation of explosive compounds, and thought that atmospheric air might be substituted.

In cases of acute obstruction in which there is reason to believe that the cause is in the small intestine, provided the symptoms are severe and urgent, the proper thing, even if an absolute diagnosis has not been made, is to open the abdomen and search for the cause, and relieve it in the best way possible. On the other hand, when the cause is in the large rather than the small intestine, there is not the same degree of urgency. He strongly advocated lumbar colotomy in certain cases. In some cases, after colotomy, there has been a gradual restoration of the bowel, and the patient has recovered completely

Dr. William Ord, of London, admitted that there was often a great deal of difficulty in the diagnosis He was in favor of the views of Dr. Fitz, and claimed a little time before resorting to operation. In some of these cases, under the use of hypnotics and time, the cause of obstruction had disappeared. Where, however, there is mechanical obstruction the case must, sooner or later, go into the hands of the surgeon. This time, he said, should be a

short one. The operation is a serious one, especially in people over fifty years of age. He said he had seen the operation performed often, and frequently fail in those cases in which there was the most reason to look for success.

Mr. Thomas Annandale, of Edinburgh, said: These cases of obstruction should be divided into two classes, the acute and the chronic. In acute cases medical measures should be tried, but not continued too long. If the symptoms are urgent, the surgeon should be called at the end of forty-eight hours. The sooner the abdomen is opened, the better. In the chronic cases, we may wait a considerable time, even until the symptoms become acute. The treatment should then be that applicable to a case of acute obstruction. He had largely given up lumbar colotomy, which he had employed more especially in rectal obstruction, and resorts to inguinal colotomy as a simpler and not more serious operation in most cases.

Dr. N. Senn, in closing the discussion, stated that there was not the least danger in the use of hydrogen gas. He had performed many experiments on animals, and had used the procedure in man. In cases of intestinal perforation, it aids the diagnosis and allows the surgeon to determine whether or not all the openings have been closed. In a recent case of gunshot wound, eleven openings near the ileo-cæcal valve were closed, and a twelfth was revealed by the hydrogen gas at the point at which the peritoneum is reflected from the bowel to the bladder. The patient is doing well, one week after the operation.

Dr. Charles K. Mills, of Philadelphia, read a paper on

Cerebral Localization in its Practical Relations.

In his introductory remarks, the speaker referred to the fact that from the clinical observation of practical physicians sprang the conceptions out of which developed the science and art of cerebral localization. Allusion was made to the discoveries of Bouillaud and of Broca on speech localization; to the announcement by J. Hughlings Jackson in 1864, that certain convolutions superintended the delicate movements of the hand which were under the immediate control of the mind, and to the fact that Hitzig's researches had originated from his observing certain movements of the eyes during galvanization of the heads of his patients. Brief reference was made to the history of American work in cerebral localization; to the investigations in 1874 of the New York Society of Neurology and Electrology; to Putnam's discovery that irritation of the white matter beneath definite cortical centres produced movements similar to those caused by irritation of the centres themselves; to the labors of Wood and Ott on the heat centres, and to the light thrown by these investigations upon the mechanism of fever and the action of drugs upon different forms of high temperature.

Before taking up the surgical aspects of the question, the speaker briefly discussed some of the practical results wrought by cerebral localization for psychological medicine and medical jurisprudence, for general symptomatology and diagnosis, and for medical therapeutics and technique. Trephining for insanity, especially when guided by the rules of localization, was briefly considered. Two of the recent cases of brain operation reported by Bennett and Gould, and by Macewen, were cited as possibly opening a new field for surgical interference in insanity—the excision of cortical areas as a method of treatment when certain subjective phenomena, such as hallucinations of sight or hearing, can be given a local habitation in the brain.

Turning to the surgical aspect of cerebral localization in its practical relations, he discussed first the forms of disease and injury in which cerebral localization is a valuable aid to diagnosis; second, the topographical diagnosis of the parts of the brain accessible to surgical interference, and some sources of error in such diagnosis. The forms of disease in which such diagnosis has been used, are intracranial tumors, cysts, fractures, hemorrhages, abscesses, and discharging cortical areas.

In considering the localization of brain tumors, Dr. Mills referred to twenty cases of autopsies occurring in his own personal experience, in about one-half of which the tumors were in surgically accessible areas, and in at least one-fourth of which successful operations might have been performed. From this experience, he advocated the excision of old gummata, and also, in special cases, of tubercular growths. The value of localization was shown in cases of fracture when the extent of the unseen damage could not be told by the position and character of the visible lesions.

Of the different forms of intra-cranial hemorrhage, the sub-dural, cortical and intra-cerebral are most amenable to topo-

graphical diagnosis. The rules for the local diagnosis of these forms of hemorrhage were then given. Dr. Mills advocated the performance of trephining in exceptional cases of hemorrhage into the ganglia and capsules—cases in which the symptoms indicated that the bleeding had not broken into and inundated the ventricles. The best site for operation in such cases is in the anterior portion of the first or second temporal gyrus. He favored Hughlings Jackson's suggestion of excising localized cortical areas, even when coarse lesions could not be made out, in cases of spasm, beginning locally or deliberately. The inaccessible areas had been narrowed down by venturesome surgical explorers, and had become reduced to the middle regions of the base and its bordering convolutions, the corpora quadrigemina, the pons and the medulla oblongata.

The characteristics of localizing symptoms were described as phenomena of irritation, destruction, instability, pressure, invasion, and reflex action. Signal symptoms and the serial order of motor phenomena were discussed. In certain regions of the brain an accurate topographical diagnosis can be made with great certainty from positive localizing symptoms. These brain areas include the entire motor zone, in which are embraced the motor or emissive speech area, the region of Broca, the visual area in the cuneus, giving lateral hemianopsia, and the intra-cerebral visual tracts; possibly also the angular gyre and the lateral surface of the occipital lobe. In other regions of the encephalon, the topographical diagnosis could be made with sufficient accuracy for surgical purposes by the study of the positive symptoms, with, in addition, the application of processes of exclusion and successive differentiation. Special stress was laid upon the importance of pressure and invasion symptoms. These areas for approximately certain topographical diagnosis, include the cerebellum, the pre-frontal lobe, the temporal lobe, and even certain cranial nerve-districts, as the auditory and facial, when the lesion could be localized within the cranium between the superficial origin of the nerves and their entrance into their foramina or canals of exit. Motor localization had become almost an exact science. The latest physiological research bearing upon the subdivision of the motor area and the light thrown upon the question by surgical operations were discussed. It was held to be imperative for the neurologist and surgeon to have exact knowledge, not only of the anterior and the posterior limits, but also of horizontal sub-divisions of the motor zone. The old method of sub-dividing the motor zone into three elliptical or circular areas from above downward was considered insufficient; but the neurologist should be able to locate for the surgeon from a study of motor phenomena at least seven or eight positions for trephining; these positions being selected by a close study of the initial or signal symptoms, the serial order of movements, and also of the amount and character of the temporary paralysis after the seizure and the method of extension of the persisting palsy. Reference was made to operations performed through accurate localization in these areas.

The neurologist and surgeon must depend upon motor symptoms alone in fixing the site for operation in cases in which the motor lesions were definite. When positive sensory symptoms were present, they might sometimes serve to aid in locating more exactly the position for operation, but the data were not sufficient for positive reliance.

The question of morphological peculiarities of the human brain was briefly alluded to as having some practical bearing upon the subject under discussion. The position of the so-called angular gyre and aberrations in the parieto-occipital region were more particularly discussed. Even the fissure of Sylvius, the central and parieto-occipital fissures sometimes present considerable variation; but, as a rule, such aberrations were not confusing in operating on the motor region.

Dr. Roswell Park, of Buffalo, N. Y., read a paper on

Cerebral Localization in its Surgical Relations.

This essay was devoted purely to the surgical aspects of the subject, and omitted consideration of those cases in which operation is dictated by a study of the subjective rather than of the objective features.

Cerebral Topographical Anatomy. The areas which most concern the surgeon are those which surround the fissure of Rolando. Lesions of the dura-mater overlying motor areas are not always to be distinguished from lesions in the cortex beneath. It is enough for the surgeon that a lesion of some kind can be located with reasonable accuracy. It matters not whether this is an old irritative lesion, an acute suppurative process between the bone and the brain, or an abscess or tumor of the brain itself. The indication for exploration is just as strong in either case.

Where can one trephine with safety? The safest rule is to first apply the trephine over those areas which do not overlie large vascular channels. Afterward the opening may be extended in any direction and to any required extent. The greatest hesitation is with regard to opening one of the sinuses. Two dangers attend such an accident: one, fatal air embolism; the other, profuse hemorrhage. The former danger is almost a theoretical one, and the other may be overcome by plugging the sinus or closing its wound with a fine needle and suture.

Cerebral and Cerebellar Abscess. Bergmann has shown that abscess of the brain has but one result: death; and that the surgeon's knife offers the only relief. So far as we know, there is no such thing as idiopathic abscess of the brain; it is always the result of some external wound of the head, or some extension from diseased bone. The only exceptions to this statement are to be found in the case of pyæmia or tuberculous abscess. The symptoms of deep brain abscess may be divided into three groups: 1. Those which are plainly due to suppuration. 2. Those of increased intra-cranial pressure and of disturbed relations. 3. Special symptoms by which the locality of the disturbance may be ascertained. So long as the gray matter is undestroyed, the collection of pus may assume large dimensions, and still no intense motor symptoms appear. Local elevation of temperature over the abscess is a symptom of importance when present, but its absence does not negative a diagnosis made on other grounds. Wernicke has stated that there is a peculiar disturbance of speech which points to lesion of the temporal region. This is the confusion of correct with incorrect words. In the general diagnosis of cerebral abscess, it is to be remembered that there usually is a latent period, which may continue for an indefinite period. The stage of active symptoms is usually ushered in by more or less headache; slight rise in temperature; local or motor symptoms can only be expected when the abscess is in the motor area of the brain.

Operation for Abscess of the Brain. Until recently operators have satisfied themselves with incising the dura. With the introduction of aspirating methods, the hollow needle came to be used for brain exploration. The dangers of this procedure are certainly small. The danger of hemorrhage has been over-estimated. A temporary tampon will control deep hemorrhage, while bleeding from the vessels of the pia-mater may be controlled with ligatures or *serres fines*.

Brain Tumors.—Considered in their surgical relations these may be divided into (1) the circumscribed or encapsulated, and (2) the infiltrated or diffuse, around which as a rule, there is a zone of softening; and a third class may be mentioned, *i. e.*, those growing from the interior of the cranium, from the bone or dura.

White found in the dead room of Guy's hospital, one hundred brain tumors, of which only nine could have been removed—one tuberculous nodule, four sarcomas, two undetermined tumors, one cyst and one myxoma.

Operation for Intracranial Tumors. The head should be shaved two or three days before operation, washed with green soap and ether, and antiseptic compresses applied. Chloroform should be, as a rule, the anæsthetic, on account of its contracting influence on the vessels of the brain. Morphia hypodermically and ergot may be resorted to for the same purpose. The author suggested that after localizing the lesion, a small, disinfected, headless tack be driven through the scalp into the bone at the point determined upon. After the dissection of the external flap, this will point out accurately the point to be first attacked. In order to prevent hemorrhage, the author had found a spray of antipyrine solution (1 to 40) of service. The semilunar flap is the proper one to raise. Its apex should be in such a position as to allow of drainage with the patient on his back. The periosteum should preferably be raised with the flap. The use of the trephine is preferable to the hammer and chisel. Since Macewen has taught us how to preserve the fragments of bone and restore them to their place, his method has been widely tried and universally commended. The dura mater should be incised around a large part of the area at a distance of $\frac{1}{8}$ to $\frac{1}{4}$ inch from the edge of the bone. The appearance of the dura is sometimes a guide to trouble beneath. In recent cases, it is sometimes highly vascular; in old cases, it may be yellowish or discolored. Wherever adherent it should be freely excised. Horsley asserts that marked protrusion of the dura indicates pathological intra-cranial tension. The color of the brain should be noted, remembering that the cerebellum has normally a different appearance from the cerebrum. Sometimes, where there is uncertainty as to which convolution is the desired one, the battery may be employed. Where no indication of lesion

is found, further exploration may be conducted with a small aspirating needle or a blunt probe.

Should a tumor be discovered, the incisions for its removal should be made perpendicularly to the cortex, for the purpose of avoiding hemorrhage and division of the conducting fibres. Removal of a layer of cortex, whether normal or abnormal, does not leave, as one might fear, a prominent gap with vertical sides, since in a short time the depressed portion is made to bulge almost to the level of the intact surrounding parts. In addition, the cut edges are also slightly everted, and if less brain is removed than bone, the edges are extruded into the opening in the skull; thus there is a continual normal tendency to hernia; but Bergmann and others have shown that this tendency to hernia-cerebri is in inverse ratio to the area of bone removed. Experience has taught that it is wise to remove brain tissue to an extent greater than was at first considered justifiable. In all operations for epilepsy the portions of cortex nearest the evident lesion should be freely removed.

The matter of drainage must be determined according to the circumstances of the case. An abscess must be drained as long as pus is discharged. After the antiseptic removal of a tumor, the cavity should seldom be drained for more than twenty-four hours. The provision for drainage may be removed on the second day, and the wound dressed with reasonable pressure over the flap. Exudation naturally collecting in this cavity, will be retained and will give rise to some pain and disturbance; but so long as the symptoms from this are not severe, the wound may be left with confidence that the fluid will be reabsorbed and that the pressure will be the best check to protrusion.

Dangers of the Operation. The principal immediate dangers are two:—hemorrhage and œdema. Hemorrhage from the pia or from the brain substance is usually readily controlled, but disastrous hemorrhage may occur from unexpected sources. When there is bleeding, a temporary tampon of iodoform gauze may be applied. The dural and skin flaps are laid over this and an absorbent dressing applied. At the end of forty-eight hours this may be removed and sutures inserted.

The second danger, that of acute brain œdema, may be brought about either by increase of intra-arterial pressure or by obstruction of the venous channels of escape. Under this accumulation, the brain becomes more sodden. Removal of a portion of the cranium is virtually a diminution of the pressure normally exercised on its contents and is often followed by reaction with production of excess of fluid.

Dr. Park said he had collected reports of 63 cases, which were presented in summary and in tabular form. Of these cases seventeen terminated fatally, although only five of these deaths could properly be attributed to the operation. Fifteen of the cases were abscesses, sub-dural or sub-cortical. In eleven cases the lesion was a tumor, exclusive of tubercular nodules. Of cysts, properly speaking, there were 12. The 25 other cases were of a miscellaneous nature. In three cases, the true character of the lesion was not revealed during the operation, and was only discovered at the autopsy. In two cases, in which no palpable or visible lesion was discovered at the time of operating, the symptoms which led to the performance of the operation were nevertheless relieved, though nothing but careful exploration was practiced.

Of the 63 operations, 17 were performed by American surgeons. Those who have themselves operated more than once are, with the number of their operations: Macewen, 12; Horsley, 11; Bergmann, 4; Weir, 3; Keen, 3; and Park, 3.

Third Session, Wednesday Evening, Sept. 19.

Dr. David Ferier, of London, in opening the discussion on the papers of Dr. Mills and Dr. Park, said that he took special pride and satisfaction in the fact that this subject had been assigned such an important place in this great gathering of the profession in this country. He had long cherished the idea that the determination of the functions of the brain would in time lead to the successful treatment by surgery of some of the most distressing ailments of our fellow creatures. When he first broached the possibility of this he received little encouragement, but now cerebral surgery had become a distinct branch of the art of surgery. There is a great future for cerebral surgery. We must, however, be cautious lest we do things which our better judgment and larger experience may not consider altogether justifiable. While there have been many successes, yet there had been some failures. He alluded more especially to cases of Jacksonian epilepsy. The discharging lesion has been removed in many of these cases without permanent cure. Care must also be taken

that in curing one affection we do not induce a greater evil. There is yet much to be learned in regard to the functions of the brain and in regard to the diagnosis of cerebral disease.

Mr. Victor Horsley, of London, described briefly the results of his experiments upon the motor region. He believed that here three functions were clearly represented: 1, the representation of the so-called tactile sense; 2, representation of the so-called motor sense; and 3, the great representation of movement. It is found that morphologically the large cells in the fourth layer are concerned in the representation of movement, and he could not understand why we should not allot to the small cells in the upper layer the representation of sensation. He had divided the motor region into minute areas and studied the effect of irritation of these separate areas. He had found that the representation for any part was not limited to one minute portion of the brain, but that there was a focal point where it was strongest and then it gradually diminished as we passed outward. In his different experiments he had met with certain points of difference. These were attributable to the employment of different species of monkeys. He now uses only the bonnet monkey, and for all practical surgical purposes the results are perfectly applicable to man.

Experiments performed during the past summer had enabled him to prove that the convulsions of so-called Jacksonian epilepsy were solely due to the cortex, and not at all dependent upon the spinal cord or upon the bulbar spinal system.

In cerebral surgery we practice simply the ordinary rules of surgery. In cutting out the bone, a one-inch trephine should be first used to determine the thickness of the skull. The surgical engine may then be used to cut almost through the portion of bone to be removed. The bone may then be removed with strong forceps. The dura-mater should be first separated. If nothing is found and the operation is an exploratory one, the dura-mater should be opened. If we propose to use Faradism for the recognition of certain areas, it is important that the ordinary antiseptic solutions should not be applied to the brain, for they tend to prevent the response to the electric current.

Parenchymatous hemorrhage may be prevented by the use of morphia. The ligature must be always applied if possible. Never pack the wound. In regard to the recurrence of epilepsy in operations performed for the relief of this affection, he considered that the recurrence was due to incomplete operation. In those cases in which he had removed to his own satisfaction not only the lesion but the surrounding brain substance for at least one centimetre, there had been no return.

He agreed with the previous speaker that there was danger of doing too much in certain cases.

Dr. M. Allen Starr, of New York, read a paper on

Cerebral Localization in Reference to Aphasia.

It is evident from the statements just made that cerebral surgery has a great future but is dependent on neurology for its guide. The burden of responsibility for future progress rests upon physicians, for diagnosis must precede operation. The great discoveries in cerebral localization, made in the past, have been reached by means of the collection and analysis of large numbers of cases of localized disease in man, rather than through physiological experiment. Future advance must be in the same line. Hence the importance, too much overlooked in this country, of recording carefully every case of cerebral disease. And to be properly recorded it must be carefully examined. This is especially necessary in the cases of disturbances of speech.

The history of aphasia presents three epochs: First, that of Broca, in which the fact was established that lesions of the third frontal convolution on the left hemisphere produced aphasia; secondly, that of Wernicke, in which a distinction between sensory and motor aphasia was drawn and the former was shown in a few cases to be due to lesion of the first temporal convolution; thirdly, that of Charcot, in which the four mental elements of speech were carefully separated. Charcot says: "a word is a complexus; in it we can discover, in persons of education, four distinct elements; the auditory memory picture by whose means we are able to grasp the sense of words heard; the visual memory picture which enables us to comprehend the words written or printed; and also two motor elements, the motor memory of articulation and the motor memory of writing—the first developed by the repetition of movements of the tongue and lips necessary to pronounce a word; the second by the practice of motions of the hand and fingers necessary for writing." Each of these memories being distinct can be lost. The result is disturbance of speech whose forms vary. The loss of visual memories produces verbal

amnesia and word blindness; the loss of auditory memories causes word deafness; the loss of motor memories of writing results in agraphia; the loss of motor memories of pronunciation produces motor aphasia. Individuals differ largely in the degree of cultivation of each of these memories, and hence suffer differently when affected by their loss, *e.g.*, the literary man presenting far more symptoms than a common laborer, when his memories of things read are lost. Another fact of importance is the independence of speech and thought. Aphasics may retain their musical faculties and may sing when they can not talk. Thinking, though largely done by the aid of speech, is not dependent upon it. We have memory pictures of the shape, form, sound and odor of objects independent of their names; and unless these are intact in the brain, the perception of the object does not produce recognition of its nature or use, and does not awaken the memory of its name. The condition termed apoaxia, is found with aphasia in some cases, but not in all.

Turning from clinical distinctions to pathology, the localization of the various memories necessary to speech, was discussed. Motor aphasia is produced by lesion in Broca's centre, or in the tract from that centre to the cranial nerve nuclei. If it is due to lesion in the latter, it is temporary and accompanied by other local symptoms. The situation of the lesion producing motor agraphia is uncertain. Word deafness is due to lesion in the first temporal convolution and is associated with word blindness when the lesion extends to the supra marginal convolution and angular gyrus. All the cases of pure sensory aphasia in which the lesion was limited to these parts (41 in number) were collected and a chart of the brain was shown to support the localization stated. The condition of apoaxia was shown to accompany lesions situated in or beneath the angular gyrus.

The integrity of the connecting tracts between the various memory-centres is also necessary to the act of speech. These can be tested; thus repetition after another, copying, writing at dictation and reading aloud, are acts involving two separate areas and their connecting tract. Lesions of these tracts produce disturbances of speech, some of which Licktheim has described. But cases have not yet been sufficiently well tested to warrant any conclusions. The necessity of careful examination of all cases to detect various defects was dwelt upon, and the speaker closed by indicating how readily accessible to surgical interference the speech areas of the brain are.

Dr. W. W. Keen, of Philadelphia, compared the head cavity to the other cavities of the body. The brain may be considered to be made up of a number of viscera having separate and distinct functions, and each of which has its own physical signs and symptoms. While we should be careful not to do too much, we should not err in the other direction. The timidity with which the surgeon formerly approached the abdominal cavity was remarkable; the boldness with which we now attack the lesions of this cavity is almost appalling and the success equally gratifying. This history will be repeated in the case of the brain.

Dr. Robert F. Weir, of New York, had since 1883 operated in 10 cases of brain disorder: three times for tumor; three for abscess; twice for hemorrhage into the cerebrum where there was no external injury to indicate its locality; once for epilepsy, and once for cerebral pain. In the last case the tumor was so deep that there was nothing to indicate its presence after the brain was exposed. It was one and a half inches below the surface. The growth proved to be a sarcoma. The operation was done last November. The patient is still living, but there are signs of a recurrence of the growth.

Bergman says that operation should not be performed when the patient is in coma or where the tumor is large. Dr. Keen has removed a tumor weighing over four ounces, with recovery, and Mr. Horsley has removed with success a tumor weighing four and a half ounces from a patient in a state of coma. Sometimes, although no tumor is found, the operation causes disappearance of the symptoms by relieving the pressure. This might be applicable in apoplectic hemorrhage where the clot could not be removed.

I have gone over the brain to find what parts are accessible to surgical interference. We are able to strip up the longitudinal and lateral sinuses to a considerable extent. The dura-mater may be separated for a considerable distance from the bone. He had been able to raise up the frontal lobe so as to see the anterior clinoid processes, and he had been able to feel the foramen magnum.

ADJOURNED.

Thursday evening's session was devoted to the Address of the President, Dr. J. S. Billings, on Medical Museums.

AMERICAN RHINOLOGICAL ASSOCIATION.

SIXTH ANNUAL MEETING, AT CINCINNATI, OHIO, SEPT. 12, 13, AND 14.

First Day—Wednesday, September 12.

The Association met at the Gibson House, and was called to order at 10.00 A. M., by the President, DR. C. H. VON KLEIN, of Dayton, O.

DR. A. B. THRASHER, of Cincinnati, delivered an Address of Welcome, after which the President, in his annual remarks, dwelt upon the progress of rhinology.

DR. J. E. SCHADLE, of St. Paul, read a paper on

Chorea of the Soft Palate

caused by the hypertrophy and hyperæsthesia of the mucous membrane covering both inferior turbinated bodies. He said some forms of headache and of spasmodic asthma are in many instances the outgrowth of a nasal polypus, a thickening of the turbinated bodies, or a septal deformity. These reflex neurotic disturbances disappear after appropriate measures of treatment have been directed toward the removal of their cause.

The patient was examined by Dr. Schadle on April 16, 1888. She then suffered from constipation and flatulency quite frequently. The heart's action was more or less excited, the heart beating tumultuously when she ascended a flight of stairs, a hill, or some other elevation. She complained of marked obstructed nose-breathing; voice was impaired, especially when singing. The principal difficulty for which she was sent to him was the spasmodic movement of the velum palati. A faucial examination revealed distinct rhythmical choreiform movements of the velum palati, accompanied by a peculiar clicking sound, distinctly audible for a distance of twelve or fifteen feet from the patient. Anterior rhinoscopic examination revealed chronic hypertrophy of the inferior turbinate bones, more especially the middle one, whose redundant tissue caused pressure on the septum and so produced obstruction of the middle meatus. The treatment was mainly surgical. Snaring was impracticable. By the use of Cohen's post-nasal cutting forceps and the electro-cautery, he reduced the growth entirely, the procedure being followed by cessation of the choreiform movements.

At the Afternoon Session, DR. THOS. F. RUMBOLD, of St. Louis, Mo., read a paper on

The Etiology and Pathology of Nasal Diseases,

in which he said that the etiology of a disease is of the greatest import, and a perfect understanding of its causes and its mechanism the goal of the pathologist. As regards heredity in the causation of rhinitis, he said he had long been convinced that such a theory is erroneous. The histological facts concerning cell-life in his opinion prove a successful contradiction of the theory of heredity.

Second Day—Thursday, September 13.

DR. JOHN NORTH, of Keokuk, Iowa, read a paper entitled

The Relation of Nasal Diseases to Other Affections, Including the Brain and Nervous System.

There is no organ, he said, in the entire body which has been so neglected as the nose. Obscure and obstinate diseases have not yielded to treatment because the latter has been directed to the effect of nasal reflex troubles and not to the nose, the cause of the trouble. In 1886, Dr. North sought to prove that neurasthenia is frequently the result of chronic naso-pharyngeal catarrh; he reported to substantiate his argument several cases, in which the neurasthenia had yielded to treatment applied to the naso-pharynx.

DR. THOMAS F. RUMBOLD read a paper on

The Effect of Nasal Inflammation on the Mind,

in which he argued that a normal condition of the mind depends upon a normal supply of blood to the normal brain; and that, if an acute inflammation in the nasal passages is accompanied by mental manifestations, mental incapacity of a more severe character must accompany a chronic rhinitis.

Dr. Rumbold's paper was followed by one on

The Etiology and Pathology of Acute Catarrh,

by DR. J. G. CARPENTER, of Standford, Kentucky.

Among the most prominent causes of acute catarrh, he mentioned occupations which exposed a person to an atmosphere full of dust, smoke, or excessive moisture—or to a dry and dusty atmosphere. Other causes that he mentioned are going about

insufficiently clad, the evil results of ordinary slippers, etc.

Pathologically, he said, acute catarrh is divided into three stages: 1. The dry stage, attended with hyperæmia, redness, heat, tumefaction, and pain in the mucous membrane, which presented a red, dry, or dark-red appearance. 2. The moist stage, supplementing the first, in which there is transudation of serum, diapedesis of the white corpuscles into the connective tissue, cell proliferation, and organization of lymph. 3. The presence of pathological conditions with denudation of the epithelium, and the presence of a raw surface; the excessive mucous secretion is changed to a muco-purulent or purulent one.

At the Afternoon Session, Dr. R. S. Knode, of Fort Wayne, Ind., read a paper on

Intra-Nasal Obstruction,

in the course of which he said that of all the mucous surfaces, that of the nose is perhaps the most sensitive to irritating gases, vapors, and dusts of different kinds, as well as to sudden changes of the atmosphere. Intra-nasal obstructions may be temporary or permanent, partial or complete, owing to the extent of inflammation or injury that produces them. Temporary occlusion is usually the result of some one of the forms of acute rhinitis. From severe attacks, or from the effects of repeated colds, the membrane may be found overwhelmed with plastic material, with a loss of nerve power, a pale, flabby, wrinkled condition somewhat resembling polypus, but more sensitive to the touch, and completely filling up both cavities of the nose. In this condition, he said he had found nothing to act so promptly as an application of a one per cent. solution of cocaine, applied with a probe and cotton, and followed with mildly stimulating solutions of chromic acid, ten grains to a fluid ounce, after which the vaseline treatment should be used. If stenosis should return, a second application of the acid may be made, or slippery-elm plugs slightly moistened with a weak preparation of cocaine and Listerine may be used instead.

Dr. E. G. Kegley, of Cedar Rapids, Iowa, reported a case of

Enlarged Tonsils with Peculiar Symptoms,

relieved by the galvano-cautery snare. The patient was a man forty-three years of age, who first consulted him in January, 1888, with regard to a trouble which the patient termed "drueling." He presented the appearances of one suffering with hay fever. His eyes were red and swollen, with excessive lachrymation; there was continual flowing from the nose, with the addition of a constant spitting of clear fluid. Examination revealed the nasal mucous membrane highly congested and completely closing the nasal passages. The patient's mouth was continually filled with saliva, and the tonsils enormously enlarged, filling the back part of the mouth and throat. Dr. Kegley applied cocaine to the tonsils and removed them both at one sitting by means of the galvano-cautery snare, the patient having experienced no pain whatever. He saw the patient the next day, and learned that the trouble had ceased almost simultaneously with the removal of the tonsils. There has been no further trouble.

Third Day—Friday, September 14.

Dr. A. G. Hobbs, of Atlanta, Ga., read a paper on the

Surgery of Gummatous Growths of the Nasal Cavities,

and reported four cases. In the first case he sprayed the nasal passages with a five per cent. solution of cocaine, and then attempted to introduce a Blake's snare, but found it impossible to engage the tumor in the loop. He therefore introduced a cutting spoon and several large masses of the growth were cut away. Four more sittings at intervals of three days enabled him to remove the growth entirely. The patient has since completely regained her health.

At the Afternoon Session Dr. A. B. Thrasher read a paper on

The Surgical Treatment of Nasal Catarrh,

in which he said that there are forms of nasal catarrh which can only be benefited, and not cured, by medicinal treatment. When there are mechanical obstructions to the lumen of the naris of a hypertrophic, hyperplastic, or neoplastic character, surgery offers the most direct path for the removal of the difficulty. With regard to the best method of procedure, he said that there are some cases in which the application of a chemical caustic answers the purpose admirably. The Woakes' gauge or plow will do the work, and by the aid of cocaine will do it rapidly and painlessly.

In uncomplicated cases of chronic hypertrophic rhinitis, the conditions to be met are: (1) Obstructions to the lumen of the naris, and (2) abnormal condition of the

mucous glands. The causal indications would at once suggest a removal of the redundant tissue. The means employed should look to the accomplishment of this end and with the least resulting scar surface, so that the natural condition of the epithelial covering might be as nearly as possible simulated. To reach this result he had met with the most marked success in the use of the galvano-cautery knife. He first anæsthetizes the part with cocaine, then introduces the knife to the posterior part of the hypertrophy, turns the sharp edge toward the tissue to be cut, heats the knife white hot, and cuts deeply, drawing the knife forward. The result is a deep linear scar in an antero-posterior direction through the hypertrophic tissue. He cuts deeply enough to destroy a portion of the submucous erectile tissue.

The following officers were elected to serve for 1889:

President, Dr. John North, Keokuk, Iowa; *First Vice-President*, Dr. A. G. Hobbs, Atlanta, Ga.; *Second Vice-President*, Dr. A. B. Thrasher, Cincinnati, O.; *Secretary and Treasurer*, Dr. R. S. Knode, Fort Wayne, Ind.; *Librarian*, Dr. N. R. Gordon, Springfield, Ill.; *Members of Council*, Dr. Hiram Christopher, St. Joseph, Mo., Dr. J. G. Carpenter, Standford, Ky., Dr. Thomas F. Rumbold, St. Louis, Mo., and Dr. J. G. Sinclair.

Next place of meeting, Chicago, in September.

PERISCOPE.

Corrosive Sublimate Poisoning in Lying-in Women.

At the meeting of the Obstetrical Society of London, July 4, 1888, Dr. Robert Boxall read a paper on the Conditions which favor Mercurialism in Lying-in Women, with Suggestions for its Prevention. The question was debated under two separate headings: (1) Increased absorption (2) defective elimination. Under the first head the site of absorption was discussed; the question as to whether or not the solution obtains entrance to the cavity of the uterus when the uterine tube has not been employed was debated, and an experimental investigation undertaken with a view to determine the point was related. It was suggested that absorption not infrequently occurs inside the uterus, even when the uterine tube has not been employed, but that it may also take place through the lacerated surfaces of the cervix, vagina, and perineum, or even through the intact mucous membrane. Reference was made to the experimental research conducted by MM. Doléris and L. Butte, which bears on this point. With a view to diminish the risk of absorption, it was suggested (1) that not only should care be exercised to obtain contraction of the uterus, but that contraction should also be carefully maintained, and, above all, that the douche should always be given at such a temperature as will stimulate the uterus to action; (2) that the douche should invariably be administered in the supine position, the uterus at the same time being supervised by one hand placed on the abdomen; (3) that, when the administration is completed, the precaution should invariably be taken of ascertaining that the uterus is contracted by palpating the abdomen, and, if distended, the fundus should be squeezed like a sponge in the palm of the hand, and at the same time should be depressed, with the object of evacuating the vagina; and (4) that the surfaces of lacerations about the external orifice should be brought together, and any abrasions which remain should be coated with some material impervious to the solution.

Under the second head, the relative eliminative power of the different excretory organs was discussed, and special attention directed to the condition of the kidneys and intestine. The following suggestions were offered: (1) That chronic nephritis, and probably also those changes which occur in the kidneys during pregnancy, may, by diminished elimination, produce an accumulation in the septum; and (2) that the intestine possesses an equal, if not a greater, eliminating power than the kidneys. With a view to obviate the risks arising from defective elimination: (1) That when the kidneys are affected the sublimate douche should not be employed, or, if used, extreme caution should be exercised; (2) that a free watery flow should be promoted by the kidneys, and that especial care should be directed to this point in hot weather; and (3) that the bowels should be evacuated daily, either by salines or by the administration of such agents as produce copious and loose stools. A tabulated series of eleven cases which presented symptoms of slight mercurialism was appended, and also a fatal case of mercurialism narrated.—*Lancet*, July 14, 1888.

Tamponing the Womb in Septic Endometritis.

At a recent meeting of the Tver Medical Society, Dr. Tzetzilïa M. Tzymkovskaia, the woman-physician to the Tver Gübernsky Zemsky Hospital, read (*Meditzinskoië Obozrenië*, No. 4, 1888, p. 366) a very instructive paper on two severe cases of puerperal septic endometritis. They refer to a peasant primipara, 18 years old, admitted on the twelfth day after normal labor; and to a servant, 28 years old, brought to the hospital on the fifth day after abortion, and ten weeks after her last menstruation. In the former, adherent placenta and fœtal membranes, and in the latter patient considerable remnants of the fœtus, were found in the uterine cavity, in a highly decomposed state. In both of them, there were present fever (up to 104° F.), extreme prostration, abdominal distension and tenderness, loss of appetite, and an intolerable offensive odor from their genitals, etc. The treatment consisted in washing out the uterine cavity with a corrosive sublimate solution (1:4000), scraping out the whole inner surface of the womb with a sharp spoon, and in tamponing the uterus with a 20 per cent. iodoform gauze, in strips measuring 3¼ and 2¼ yards in length and 2½ inches in breadth, thickly sprinkled over with iodoform powder. The tampon was inserted by means of a uterine sound, after the cervix was dragged downward with a volsellum forceps. It was left *in situ* for three days in both of the cases. The effects were as rapid as striking. The women's temperatures fell down to 99.3° F. and 99.4° F. respectively on the first evening. The offensive odor disappeared immediately. The patients' subjective feeling, appetite, and general state commenced to improve steadily from the very beginning; and the women were discharged perfectly well and sound about seven and five days after their admission. Dr. Tzymkovskaia observes that the antiseptic tamponade of the womb was first practiced in Professor Gusserow's clinic (*vide* the *Centralblatt fuer Gynecologie*, August, 1887) as a hæmostatic measure in cases of puerperal atony of the womb. Her cases, however, brilliantly prove that the tamponing possesses also an admirable disinfecting action. In fact, the tampon not only prevents any putrefaction, but also checks the process—and that even when the latter is in an advanced state. She draws attention, further, to the fact that the procedure is especially advantageous in country practice, since the patient, with her womb tamponed, can be safely left without any troublesome irrigations or injections for two or three days.

Treatment of Xanthoma by Electrolysis.

Dr. Ernest Wende, of Buffalo, reports two cases of this affection in the *Medical Press of Western New York*, September, 1888. In the first case, a married woman, brunette, native of this country, 63 years of age, in perfect general health, applied to Dr. Wende for the removal of xanthoma, whereby she might gain greater cosmetic improvement. The disfigurement was characterized by the formation of two sharply defined chamois-skin-like plaques, one about as large as a three-cent silver coin, occupying the right upper lid near the inner canthus, the other a trifle smaller, which was found almost in a similar position on the left lid. These symmetrical plaques were oval in outline, soft, smooth, and slightly raised over the skin in which they were imbedded.

In the second case a Jewess, brunette, married, 51 years old, general health good, consulted Dr. Wende for a like purpose, the case differing however from the first in that the tumors were of the nodular variety, instead of being flat. There were five in all, varying in size from a pin's head to a pea. Excepting the larger, which was seated on the side of the nose, they were situated on the lids. Knowing that these new formations consisted mostly of fibrous tissue with a deposition of fat, he thought it desirable to destroy the former by the action of electrolysis, with the hope of causing a subsequent disappearance of the whole. For this purpose an electro-negative needle, which was made of gold, was inserted laterally at various points into the neoplastic formations in a direction parallel to the outer surface, and the circuit closed by the ordinary sponge electrode (positive) which was moistened and held in the hand. A current of nine galvanic cells of a twenty-celled Waite & Bartlett galvanic battery was passed through them. After one sitting, lasting twenty minutes, the xanthomatous plaques and nodules darkened in color, and soon dried into eschars. On the eighth day the crusts began to fall off, leaving the skin beneath somewhat reddened; but this gradually faded to its normal aspect, became perfectly smooth, and left no trace of a cicatrix and no remaining vestige of the new growth.

Suture of Nerves and Tendons at the Wrist Joint.

Dr. J. F. Springle reports this case, which occurred under care of Dr. Fenwick in the Montreal General Hospital.

Gabriel D. was admitted to the hospital at 8 P.M. on May 2 last, suffering from a large and deep wound opening the right wrist joint, inflicted by a circular saw. The patient was much weakened by loss of blood when first seen by the House Surgeon.

On examination, a deep lacerated wound, at the back of the wrist, was found, severing all the extensor tendons of the thumb carpus and fingers. The supinator longus tendon, radial nerve, and artery were torn across. The lower ends of the ulna and radius and the proximal line of bones of the carpus were torn and splintered. The flexor tendons and the ulnar artery and nerve were uninjured. At 9 P.M., Dr. Fenwick, assisted by Dr. Shepherd, brought the several tendons and nerves together with fine catgut sutures and fine silk. The arteries were tied with catgut ligature. A quantity of splintered bone and torn ligamentous tissue was removed. The wound was thoroughly irrigated with sublimate solution (1-2000) and its edges brought together with silk Two drainage tubes were inserted at each end of the wound. The arm was then placed upon a straight splint extending from the elbow to the tips of the fingers, and the wound dressed with iodoform gauze and rubber dressing.

On May 17 he suffered a great deal of pain at the tips of the fingers. The temperature was 99°. The pain was greater at night, necessitating the administration of morphia. The next day he felt easier. Temperature 100°. On the 23d, the wound was dressed for the first time; the dressings were soaked with discharge. The edges of the wound were united in places. A pocket of pus, which had formed in the forearm, was opened and drained. Sensation had returned to the back of the hand and fingers, it having been absent in all except the little and ulnar side of the ring fingers. The limb was dressed and supported upon an inclined plane, the splint being removed. A great deal of sloughing was taking place in the wound on account of the extensive laceration of tissue. On the 28th the wound was again dressed. Sensation had improved; he could feel a slight touch of the finger or the prick of a pin.

The notes taken June 5 state: Temperature has been very irregular, reaching 101° to 103° at night and falling to normal in the morning. Suffers much pain at night. Several collections of pus were opened. Sloughing still continues. Sensation about the same.

On the 8th, sensation was better, temperature was lower, and patient suffered less pain at night. Improvement from this time on was steady.

This patient presented himself at the hospital August 12. He had fair motion of the fingers, and sensation in the back of hand was quite normal. There were still two or three sinuses on the line of the wound, which lead down to necrosed bone. A day or two before the remains of the scaphoid bone were removed.—*Montreal Medical Journal*, Sept., 1888.

Local Anæsthetic Action of Helleborine and Strophanthus.

Venturini and Gasparini, says the *Wiener med. Presse*, September 2, 1888, have made an interesting communication on the local anæsthetic action of helleborine and strophanthus, to the medical society of Sienna. Several drops of a very weak solution of helleborine were dropped into the conjunctival sac of rabbits or dogs; after fifteen minutes complete anæsthesia of the cornea occurred. The cornea could then be cut and even torn without the animals giving the least expression of pain. This complete anæsthesia of the cornea is obtained with three or four drops of a standard solution of helleborine, each of which contains 1-32 grain of helleborine. The anæsthesia lasts half an hour, and leaves behind no disagreeable accompanying symptoms. Anæsthesia with helleborine, they say, deserves the preference over that obtained with cocaine in ophthalmic operations, first, because it only involves the cornea; second, because helleborine acts in very dilute solution and neither irritates the cornea nor the conjunctiva; third, because the helleborine anæsthesia lasts longer than that obtained with cocaine; and finally, because the former exercises no influence upon the pupil and the intra-ocular pressure. When used hypodermically, anæsthesia was obtained at the point of injection; but as it exerts a strong toxic action upon the heart, it needs to be used very cautiously in this way in the neighborhood of the heart. Venturini and Gasparini have further found that a neutral extract of strophanthus hispidus, free from alcohol, produces, even when in very small quantity, a complete anæsthesia of the cornea, which lasts longer than cocaine anæsthesia.

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CHARLES W. DULLES, M.D., EDITOR.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

THE CRUELTY OF COWARDICE.

Under this striking title the Louisville *Courier-Journal* recently published an interesting editorial in which it endeavors to combat the prevailing fear of the spread of yellow fever from Jacksonville, Florida. It is not pleasing to note that this editorial speaks in a way far from flattering of the recent behavior of the health authorities of the United States, and of certain cities; but it must be admitted that there is some ground for its criticisms. In the present state of medical science it is pretty generally suspected that yellow fever is a disease produced by the action of a specific germ; but this is only a suspicion, and so far from being a demonstrated fact that it is no wonder those who are somewhat incredulous in regard to germs in general should express a certain contempt for sanitary measures of unusual harshness which are founded upon an unquestioning faith in them. The *Courier-Journal* says truly: "A germ is something terrible to the average imagination, because it is unseen, intangible and unknowable." After this, it proceeds to describe some of the unreasonable and ridiculous steps which have been taken in different parts of the United States to prevent the supposed germs of yellow fever from occupying and devastating the land. These steps, it must be admitted, have been quite as absurd as they appear to the *Courier-Journal*, and they are to be regretted not only because they have a tendency to increase panic and cultivate false notions in regard to the disease in question, but also because they lessen the respect of our fellow citizens for the members of the medical profession.

One of the greatest dangers to science in our day is the disposition to draw important conclusions from inadequate premises. The very process of reasoning is indeed sometimes perverted; the inductive method is abandoned for the deductive, and theories which are still in the stage of hypothesis are treated as if they were formally established. This is exemplified in much which has occurred of late in connection with the yellow fever. The assumption that is caused by a specific germ is as yet only an assumption, and there seems to be some danger that, in the pursuit of this idea, important facts bearing upon the development and propagation of the disease may be overlooked. It may be true—and there is much to make it seem probable—that yellow fever is produced by some form of bacteria; but of this we are by no means sure yet. As we have already said, in the REPORTER, September 22, we trust that the present unfortunate epidemic may yield some useful scientific fruit to offset its sad effects on life and health; but we fear that these fruits will not be matured by much which has been done of late in the name of Science. If we, as medical men, are to make solid advances in our knowledge of this disease, and to

give no cause for such stinging criticisms as have suggested this editorial, we must be careful to avoid committing or endorsing errors which are founded upon unreasoning fear, or hasty assumptions. The case is one for the exercise of the calmest judgment and the most severely logical processes of reasoning. Only in this way can we hope to attain a position from which we may command the respect of our fellow-men and cope effectually with this grave disorder.

As Archbishop Whately says in the Preface to his Elements of Logic: "Truth will, indeed, prevail, where all other points are nearly equal; but it may suffer a temporary discomfiture, if hasty assumptions, unsound arguments, and vague and empty declamation, occupy the place of a train of close, accurate, and luminous reasoning."

THE HOMŒOPATHIC STATE MEDICAL SOCIETY.

The Homœopathic State Medical Society of Pennsylvania has just concluded an interesting meeting in Philadelphia, and has displayed a fitness for the discussion of important medical questions which would hardly be expected by those who are not familiar with the advances made of late by those who bear this designation. In fact, the proceedings at this meeting were so like those of any "regular" medical society that it is hard to discover any homœopathy in them at all. It would appear indeed that our homœopathic fellow-practitioners have studied the developments of medical science to such good purpose that the tenets of Hahnemann have come to occupy but a minor and subordinate position in their thoughts and practice.

The mental attitude of what are known as "advanced" homœopaths is strikingly exhibited in the opening address of the President of the Society, who stated that he had been forcibly impressed at last year's meeting with the following questions: "Does homœopathy constitute the whole of therapeutic science?" "Is the physician best prepared to cope with disease in its varied forms, whose knowledge and use of drugs is always and only confined to their homœopathic use?" "Has the physician discharged his full duty to his patients, in all cases, when he has made the most careful selections of the symptoms in the case?" "May the (homœopathic) medical school, in view of its responsibility in the education of physicians, confine its therapeutic teachings to the homœopathic medication alone?" and added that he had been constrained to answer them all in the negative.

Now, here is a frame of mind which must be gratifying to all who hope to witness the downfall of exclusive dogmas. Were Hahnemann alive to-day, we believe it would fill him as much with distress as it does us with hope. We imagine he would repudiate such sentiments as strongly as we applaud them, but that he would join his voice to ours in urging those who cannot conscientiously follow his teachings to abandon the name which he adopted.

The relation of what is called homœopathy in these days to "regular medicine" has been often enough discussed, and sometimes with so much acrimony that no possible good could come of the discussion; but the time seems to be approaching when the sincere supporters of truly scientific methods in medicine may, with some hope of success, invite those who follow the same methods to give up a name which now separates them from those in whose company they ought to be found, and which misleads only those who do not understand either it or them.

The harsh criticisms which have been applied to those who call themselves "homœopaths" may be deserved by some of them; but we cannot doubt that many of them are actuated by the same motives and governed by the same principles as actuate and govern those from whom they stand apart. These men, like the President of the Pennsylvania Homœopathic State

Medical Society, believe that experience and observation furnish the only rational basis for the practice of medicine, just as we do. They may believe that Hahnemann's theories furnish a useful basis for practice in some cases. But they know that, if this is demonstrated by experience, nothing in the tenets of the old school prevents its adherents from profiting by this knowledge. They know that the main objection we have to what is called homœopathy is that it claims universal or exclusive applicability for a principle which they and we know is not of universal or exclusive applicability. We cannot see how this fact fails to impress all intelligent and conscientious men alike, and why some men to whom these characteristics cannot be denied do not come out from the company of those who are suspected of using the name of homœopath for purely commercial reasons.

We believe the time will yet come when this state of affairs — to which we refer with no unkindly feelings—will cease, and when such men as made the last meeting of the Pennsylvania State Homœopathic Medical Society almost undistinguishable from a similar meeting of "regular" physicians will not debar themselves from association with all other scientific medical men by holding fast to a name which misrepresents them and discredits them in the opinion of men who have no desire to be unjust or uncharitable.

A FAULT IN MEDICAL JOURNALS.

It is with considerable regret that we observe that some of our most respected contemporaries at times relax a little the virtue which usually marks them, and admit to their pages "reading notices" published solely in the interests of their advertisers. One of the most insinuating of these appeared not long since in several of the best medical journals of the country in the shape of a review of a small book, issued by a rich advertiser, which the REPORTER refused to notice because it had no scientific value and was almost wholly composed of testimonials, written by amiable physicians, to the virtues of special preparation.

The objection to this sort of thing is twofold. First, it is no proper material for the reading pages of a publication devoted to so serious a subject as the science and art of medicine. Second, it is never impartial and cannot fail to be unfair, either by an act of commission or an act of omission. A medical journal which would systematically discuss the merits of all commercial claimants for professional approval, might, if gifted with superhuman intelligence and wholly free from bias, serve an excellent purpose; but a journal which publishes only laudatory notices of wares advertised in its pages cannot escape the suspicion of being influenced by mercenary considerations. Unfortunately there are many medical journals in America which do this. Most of them do it—as one frankly admitted—because they are too poor to resist the pressure brought to bear on them by the advertisers.

We wish they had more courage and more strength, for the sake of their readers; and we regret very much that the strain on the weaker and less courageous should sometimes be increased by the conduct of vigorous and prosperous periodicals which ought to be both an example and a support to them.

—Babies are said to be dying so fast in Manchester, England, that the city is aroused over the subject. The great majority are overlaid by parents in bed, four such deaths having occurred during one week. The London correspondent of the New York *Times* reports that "there is a general suspicion that such deaths are wilfully caused or permitted, either for the purpose of getting rid of the child or obtaining club money or insurance. Nearly all the cases occur on Saturday nights, when the parents are more or less stupefied by drink. Manchester's Deputy Coroner makes out a statement which demands legislative consideration. He points out that in Germany parents are arrested and convicted under such circumstances, and says such a law is greatly needed in England."

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

AN ILLUSTRATED ENCYCLOPÆDIC MEDICAL DICTIONARY. BEING A DICTIONARY OF THE TECHNICAL TERMS USED BY WRITERS ON MEDICINE AND THE COLLATERAL SCIENCES, IN THE LATIN, ENGLISH, FRENCH, AND GERMAN LANGUAGES. By Frank P. Foster, M.D., Editor of the *New York Medical Journal*, with the collaboration, etc. Vol. I, with illustrations. A. Cacos. Quarto, pp. xii, 752. New York: D. Appleton & Co., 1888.

It is with great pleasure that we welcome and recommend to the attention of the readers of the Reporter this magnificent work, prepared under the direction of one of the ablest editors in the United States, and published by a house well known to the readers of good medical books. It would be impossible to give an adequate notion of its literary merits in the space at our disposal; but it is enough, perhaps, to say that a careful scanning of its pages and a search for words which occurred to the writer of this review have resulted in the finding of everything to be expected in a book of this character. The comprehensiveness of the book, as a dictionary, is simply wonderful, and the clearness of its definitions is, in the highest degree, creditable to its editor and his able collaborators.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

An Experimental Contribution to Intestinal Surgery, etc. By Nicholas Senn, M.D., Milwaukee, Wisconsin. From the *Annals of Surgery*, June, 1888. 84 pages.

The Weaver Case. By Hampton L. Carson, Esq., Philadelphia. The Case of John Daley. By John B. Chapin, M.D., Ellwyn, Pa. Philadelphia: Published by the Medical Jurisprudence Society.

On the Advantages of Plaster-of-Paris Dressings as a Means of Spinal Support. By Lewis A. Sayre, M.D., New York. From the *New York Medical Journal*, June 16, 1888.

The Result of Antiseptic Treatment of Abscesses Connected with Disease of the Hip Joint. By R. H. Sayre, M.D., New York. From the *New York Medical Journal*, June 16, 1888. 7 pages.

Medical Expert Testimony. By F. H. Darby, M.D., Morrow, Ohio From *Transactions Ohio State Medical Society*, 1887. 5 pages.

The Physiological Argument in Obstetric Studies and Practice. By A. F. A. King, M.D., Washington, D. C. From the *Amer. Jour. of Obstetrics*, April, 1888. 18 pages.

—Dr. Senn's pamphlet contains an address which he read at the Ninth International Medical Congress, September, 1887. It gives an account of a large number of experiments in regard to a variety of surgical operations on the intestines It would be impossible in a short space to give any adequate idea of the ingenuity and skill displayed in these experiments, or of their important bearing upon the subject of intestinal surgery. We can only recommend our readers to try to get the pamphlet, and study its contents for themselves.

—These two papers were read before the Philadelphia Medical Jurisprudence Society in May, 1887, and April, 1888, respectively, and were recently published. The first paper contains an account of the proceedings and issue of a case involving the question of the sanity of a Dr. Weaver, which is of interest to lawyers on account of the technical questions raised, and of interest to all men, inasmuch as the result was that a man, who was sane in the opinion of the commissioner who took the testimony, and of a large number of skilled witnesses, was left in the position of being adjudged insane.

Dr. Chapin's paper gives an account of the case of a man who was acquitted of a charge of murder on the ground of insanity, in Washington, D. C., under circumstances very similar to those under which another man, named Webber, was recently convicted in Philadelphia. The story is of especial interest for experts in insanity, and shows how differently different juries will estimate the import of expert testimony.

—The reprint of Dr. Sayre's paper on the Plaster-of-Paris dressing for the treatment of disease of the vertebræ contains also a report of the discussion which followed the reading of it at the New York Academy of Medicine This adds much to its value, as it presents the views of those who prefer other methods of treatment. Some of the latter manifest what may be almost called animosity toward the method which Dr. Sayre's work made, for a time, almost universal. But the fact remains that this method has been of incalculable benefit to thousands of sufferers, and this pamphlet, which contains an account of how he first came to use it, and his present opinion of its value, is of very great interest, and we commend it heartily to the attention of our readers.

—Dr. Reginald Sayre's pamphlet contains remarks he made on May 18, 1888, before the New York Academy of Medicine, in regard to, and advocating strongly, the opening of abscesses dependent upon joint disease, with antiseptic precautions, and the discussion which followed them. Both are very interesting and instructive reading. There can be no doubt that the different opinions held by the various speakers is partly due to their different conceptions of the operation under discussion. Those who opposed the views of Dr. Sayre seem to have underestimated the importance of thoroughly cleaning out the abscess cavity, and removing the diseased tissue which surrounds it. This is such an important part of the operation, that it is not surprising to find that opinions in regard to the operation differ when some surgeons regard it as essential and others seem to have omitted it.

—Dr. Darby makes a strong claim that medical experts should be regarded as *employés* of the Court, and paid accordingly. He also points out the manner in which the subject of expert witnesses is regulated in certain countries of Europe, and the superiority of this manner to that which prevails in the United States.

—We have already, in an editorial in the Reporter, June 16, 1888, called attention to this interesting address by Dr. King, and we limit ourselves now to repeating our commendation of its sensible and admirably put suggestions, and to advising our readers to send for a copy and read it for themselves.

CORRESPONDENCE.

Animal Skin Grafting.

TO THE EDITOR.

Sir: I received this morning a letter from you dated April 27, 1888, which, having but one postmark, I presume had been lying in the interim forgotten in your office.

I am very glad to hear that you consider my modification of Reverdin's plan of skin-grafting of value; but it has been very little used here, apparently for the reason that in populous centres—where it would be most useful—it is difficult to obtain wild rabbits alive, whilst in the country, where they are plentiful enough, the necessity rarely presents itself. The skin of the domestic animal is so loaded with fat that its vitality would be lost before it could be made ready for application; that of the wild is quite free from it and so thin that it can be transferred with the utmost facility: hence its selection. But, since the publication of my *brochure* a countryman of your own has advised the using of the skin of the common fowl and taken from the nearly bare patch under the wings. I regret that I cannot recall his name, and the more so as his suggestion is much better than mine.

The usefulness of either is best shown in treating large denuded areas such as are left after severe burns or contused wounds; an example of the latter class I have had recently in extensive sloughing of the scalp after a fall. In that case it answered extremely well, and I could only regret that the rabbit's fur had not remained permanently adherent, for there is left a smooth bald place of distressing conspicuousness. And Dr. Dolder, the editor of the *Provincial Medical Journal*, wrote me about three months ago that he had made use of my expedient in the case of a sloughed wound four inches in diameter left after an ovariotomy, and that it was almost completely healed within a week.

If it were not for the obstructive action of the Vivisection Act in this country the plan could be made still more useful, for, from a chloroformed rabbit a sheet of skin six or eight inches square could, I believe, be successfully transferred; the animal to be of course killed before it had recovered consciousness. As it is I have not attempted to remove pieces larger than a silver dollar.

I may be permitted to add that I feel especial pleasure in seeing any work of mine noticed in the American press, for I am indebted to the energetic government of the United States for my rescue from a terrible death in Paraguay in 1868, although that obligation was so painfully discounted by the cowardly and wanton brutality of Captain Kirkland who commanded the expeditionary gunboat. Nevertheless I shall ever regard the people of the United States with the most grateful remembrance.

I have the pleasure of sending herewith a copy of my pamphlet, of which pray make any use you may think proper.

Yours truly,

G. F. CADOGAN-MASTERMAN, M.D.

Yorke House, Stourport, England,
September 7, 1888.

NOTES AND COMMENTS.

Simple Way to Test the Acidity of the Contents of the Stomach.

A simple method of testing the acidity of the contents of the stomach is suggested by Spaeth, in the *Münchener medizinische Wochenschrift*, as follows: Cut alder pith into small cylindrical bits and immerse them for twelve hours in a solution of Congo-red (15 parts of the coloring matter to 1000 parts of water), dry them, and put away for test purposes. To use them, first make fast to the end of a strong silk thread a No. 6 shot, string one of the colored cylinders on the thread, and make the patient swallow it—holding fast to the free end of the line, of course; after a few moments withdraw the test pith and the depth of the blue discoloration of it will give an approximate idea of the acidity of the gastric fluids.—*National Druggist*, August, 1888.

Effects of High License in Minnesota.

The *Pioneer Press* gives an interesting review of the results of the first year of high license in Minnesota, and finds that the system has proved to be all its friends asserted of it. It seems that there are in Minnesota only 1,597 saloons now as against 2,806 when the law went into effect. A decrease in the consumption of alcoholic drinks is shown in nearly every county. Low groggeries have been closed up, and the liquor business is under better police supervision. Under the old system the average cost of a license was about $300, and the total approximate income was about $850,000. Under high license the average cost of permission to sell is about $650, and the total approximate income is about $1,100,000.

Cactus Grandiflorus in Heart Disease.

The *Chemist and Druggist*, August 11, 1888, says that this remedy for heart disease was the subject of a recent paper by Dr. Orlando Jones, of Harrogate. Cactus grandiflorus is a native of Jamaica and Vera Cruz. A good description of this plant is given by Grim. Its flowers are remarkable, being very large, the calyx measuring about a foot in diameter. It is possible, Dr. Jones thinks, that other plants of this order may be equally valuable, as possessing properties that will control the heart's action, for Professor Robert Bentley states that the fruits of many species are useful in febrile diseases. Dr. Jones gave notes of cases in which the remedy had been used, and the results appeared to show that this remedy may be used as a substitute for digitalis when that remedy is inapplicable owing to its over-stimulating action, and in cases of feeble heart. The final stage of the action of the drug is that it strengthens the heart, and consequently improves the circulation, so that the result of the exhibition of cactus is the reverse of that seen in digitalis.

Disinfectants that Neutralize Each Other.

Dr. Joseph Holt, formerly President of the New Orleans Board of Health, in a letter on the yellow fever in Florida, recently published, used this language: "When the sulphurous fumigation is used after the wetting of surfaces with the mercuric solution, 'the sulphurous gas' does not 'unite with the mercuric salt forming a compound which impairs the germicidal power of both,' as declared by Assistant Surgeon J. J. Kinyoun, of the United States Marine Hospital Service, in his recent report on the Louisiana quarantine. That officer was sent here as an expert, and has made a positive statement in regard to a point in chemistry without having taken the trouble to try the experiment. When sulphurous-acid gas or liquid, or sulphuric acid, is added to a solution of the bichloride of mercury, there is absolutely no chemical interchange, but the solution remains perfectly clear. A drop or two of the solution of the iodide of potash will reveal the mercuric element by an abundant precipitation."

This is a very important matter, says *Science*, September 14, 1888, on account of its practical bearing on the effectiveness of the two agents mentioned, in disinfection, and the results that follow from using one after the other. Dr. Kinyoun has therefore written a reply, from which the following extracts are taken: "As Dr. Holt is a man who wields a large influence in the Southern country in regard to sanitary matters, I think it only a matter of justice to the public to correct the error that Dr. Holt has himself made in stating that the sulphurous fumes do not form an insoluble compound with the mercuric salt, etc. In this connection I would respectfully state that the fact had been long known to me, even prior to my inspection of the Louisiana quarantine, that when SO_2 is passed through or brought in contact with a solution of bichloride of mercury a change took place. The mercuric was changed to a mercurous salt; and, observing it during the process of fumigation, I confirmed it before submitting my report. Owing to the want of time, I have not undertaken to find out the exact proportion of the constituents due to the re-action. Suffice it to say that the precipitate is calomel.

"It is apparent that, if bichloride solution is used prior to sulphur fumigation, the amount of water alone which is present would absorb a great quantity of the gas, and prevent its penetration where the bichloride solution does not reach; and when the change occurs in the solution of bichloride, it is obvious that the germicidal power of both is impaired. When SO_2 is passed through a solution of bichloride containing an equal quantity of ammonia at the temperature of 25° to 40° C. (77°–104° F.), the change takes place slowly; but when the solution or gas is heated to from 40° to 90° C. (104°–194° F.), the change takes place rapidly, converting nearly all the mercuric to a mercurous salt."

The Treatment of Snake Bites.

Dr. C. R. Earley, of Ridgway, Pennsylvania, writes to the *College and Clinical Record*, August, 1888: "I have treated many cases, and have a record of twenty-five very bad cases, all of which were treated by the free use of olive oil internally and externally. I have never directed any other treatment. The inhabitants of locations where rattlesnakes and copperheads are found always keep a good supply of olive oil in their houses, and when bitten never call a doctor, but use olive oil freely, which in every case gives full and complete relief. Therefore my experience for the past thirty-eight years has fully proven the correctness of the treatment with olive oil of Dr. Miller, of South Carolina."

A New and Rational Treatment for Gonorrhœa.

Under this attractive title, Mr. Charles J. Smith, formerly Surgeon to the Farrington Dispensary, states in the *Lancet*, September 1, 1888, that he has been able to cure his cases of gonorrhœa in five days by using an instrument by which an ointment is made to cover the inside of the urethra. The instrument is modeled after Mr. Allingham's rectal ointment-introducer, and consists of an oblong ointment-container with a long broad screw to expel its contents. To the box are attached perforated stems of different sizes to fit closely the urethra, which he says must be stretched by as large a stem as can be introduced, so as to spread the ointment fairly and well over every portion. The bladder should be emptied immediately before the instrument is introduced, so that the urethra will be well washed out from behind. The stem is well oiled before introduction, and, when once introduced, the screw is turned, the ointment expressed, and the whole instrument rotated as it is withdrawn. He uses a mixture of oil of eucalyptus and olive oil. Three hours after using the instrument, a mild injection (he does not say of what) is used, and the ointment-applicator used again the next morning. The only medicine given is a saline aperient.

The principles applied in this treatment are sound, but Dr. Smith's statement as to their efficiency needs confirmation. Certainly cocaine should be used before the instrument is inserted, not only because the use of the latter would itself be painful, but because the oils are irritating.

Rare Case of Tuberculosis of Sternum.

Professor le Denter recently showed an interesting case at a meeting of the Paris Academy of Medicine. It was that of a man whose sternum and part of the superior ribs were entirely gone, as the result of bone tuberculosis. In order to put a stop to the abscesses that were in progress, M. le Denter removed all the diseased parts of the bones, and the operation was entirely successful. Besides preserving the patient's life, it had the advantage of rendering the man a very interesting object of study for physiologists. The whole of the inferior two-thirds of the sternum being removed, and also part of the anterior extremities of the corresponding ribs, the base of the heart and part of the aorta are very accessible to physiological investigation. This investigation has been carried out, through the methods at the disposal of modern physiology, by Dr. H. de Varigny, under Professors Chauveau and Richet's supervision; and the result is, that very fine graphic representations of the aortic pulsation have been obtained, which are quite identical with those obtained on higher animals. — *Popular Science News*, August, 1888.

Paris Doctors and Signs.

The Paris correspondent of the *New York Med. Journal*, September 1, 1888, says: One of the rather curious facts in regard to medical customs in France is the difficulty a stranger has of finding a physician's house, notwithstanding the fact that Paris has as large a proportion of physicians as any other city—not excepting some American ones. The greater number display no sign, and when you know that in Paris one house is as like another as two peas, it is easy to imagine the trouble of finding the right house when on the search for a doctor. Not only is there no "shingle" on the front door, but there is not even one on the door leading to the office—not even a card to show the stranger who lives in the *appartement*. We were told the other day of an American's search for a celebrated French specialist's office. He had the world-wide known name well enough, but could not pronounce it as they do here. However, by writing it, he found the boulevard, and, fortunately, he had the right number, but here again his troubles began, as he did not understand the polite "concierge's" instructions as to which floor the doctor occupied. Nothing daunted, our Yankee friend mounted the stairs, hoping to find at least the family name on a little silver plate on the door, but, alas! after mounting seven flights he could see no sign. Determined not to be beaten, however, he wrote the name on a paper, and, commencing at the first floor again, he conscientiously rang at all the doors until he found the right one. Among all the thousands of physicians who practice in Paris, *not one*—except the English and Americans who practice here—has his name on his own door, nor on the street door. Among the cheaper class of physicians will be found a small sign saying "*Docteur en médecine de 1 à 3 heures*," but no name is given; and as to the better class, not the slightest indication is given that they live in a house. It is a curious Parisian custom.

Strophanthus in Heart Disease.

Fraenkel, Guttmann, and Langgaard have recently given the result of their experience with strophanthus. Fraenkel believes that it modifies blood pressure and causes diuresis, diminishes dyspnœa, and is a genuine cardiac drug. He has employed it in twelve cases of valvular disease, two of arterio-sclerosis and hypertrophy of the left ventricle, three of simple cardiac weakness, and three of chronic nephritis. Four of the first set were relieved by the administration thrice daily of from five to fifteen drops of the tincture; the others were not benefited. The second and fourth groups were not benefited, but the third was greatly relieved.

Dr. Liddell, of Winchester, had two cases of degeneration, in each of which the heart and general condition of the patient were markedly ameliorated not only during the time strophanthus was administered, but also after the cessation of treatment. In some cases of failure of the circulation, strophanthus gave little if any relief, and on administering digitalis benefit resulted. In elderly people with degeneration of the arteries and the heart beating vigorously; dyspnœa with palpitation; the pulse feeble and more easily compressible than usual—strophanthus failed to give relief; digitalis was then given, and brought about marked benefit.

Strophanthus has in several of Mr. E. G. Dutton's cases produced an intermittency in the heart's action, always relieved by increasing the dose—an effect not mentioned by other observers. The salicylates can be given in combination with strophanthus when they cannot be borne alone on account of their depressing action on the heart. He thinks it of inestimable benefit in inorganic heart affections.—*Quarterly Therap. Review*, July, 1888.

Use of Opium in Young Children.

Roth (*Bulletin Médical*) has proved that opium given to young children, even in very small doses, produces convulsions which may become fatal. It also, when given to the mother, produces movements in the fœtus which are to be recognized as convulsions. Roth cites a case illustrating this: in a pregnant woman who had received large doses of opium the movements of the child became in a short time powerful and almost unbearable. Roth therefore thinks that the employment of opium for the prevention of abortion is irrational.—*Deutsche med. Wochenschrift*, August 2, 1888.

Tannic Acid in Burns.

Nikolsky (*St. Petersburger med. Wochenschrift*) has employed, in 18 cases of burns of the first and second degree, applications of an alcoholic solution of tannic acid, with very good results. He orders:

℞ Acidi Tannici . . . . . ℥i
Alcoholis (95 per cent.) . q. s. (circ. f℥i)
Etheris sulph . . . . . f℥i
M. Put the mixture in a vessel with a glass cork.

The burned part is cleansed with a disinfectant, then the tannic acid is applied until a firm film is formed (by coagulation of albumen), and this is repeated two or three times a day, as often as this film cracks. The whole is then covered with a dry compress. Blisters are cut, the contents expressed with cotton, the surface of the wound dusted superficially with iodoform, and then painted with the solution of tannin. Pain is usually diminished and the treatment does not last long.—*Deutsche med. Wochenschrift*, August 2, 1888.

Damages for Infection with Syphilis.

In the Paris law courts recently, the parents of a child suffering with hereditary syphilis, which communicated the disease to its nurse, were condemned to pay about $400 damages to the woman. Each of them has also had to pay a fine of about $20. The decision was grounded on the clauses of the Code providing for the punishment for wounds or other injuries inflicted through carelessness. It appears that the parents were aware of their child's condition.—*Medical Press and Circular*, September 5, 1888.

Cocaine and Nitrite of Amyl.

In the case of a vigorous man who had to be operated on for hydrocele, M. Ounkorsky (*Vratch*) injected two Pravaz syringefuls of a solution of hydrochlorate of cocaine (one part in twenty-five). The following phenomena appeared: Restlessness, lumbar pain, pallor, vertigo, weakness of the voice, oppression, feebleness of the pulse, general weakness, loss of power in the extremities, all objects seemed uniformly white to the patient. This condition lasted for an hour when nitrite of amyl was employed by inhalation. The patient inhaled altogether about fifteen grains of the substance, and received besides three injections of sulphuric ether—a Pravaz syringeful at each injection. In half an hour afterward, all the symptoms of cocaine poisoning disappeared.—*Bulletin Médical*, July 8, 1888.

Antipyrine and Cocaine in Childbirth.

In a letter to the *Bulletin Médical*, July 8, 1888, a correspondent relates a case in which he injected into the abdominal walls of a woman a solution of antipyrine and cocaine, for the purpose of relieving the pain and distress attendant upon child-birth. The amounts employed seem very small—about six grains of antipyrine and about one-twelfth grain of cocaine. The effect was to produce great calmness and a painless delivery. No bad effects, such as headache and ringing in the ears, were produced. The conclusion is suggested that antipyrine calms the pain due to the uterine contractions without arresting their progress. On the other hand, it may be that, the apprehension of suffering being removed, the patient is in much better condition to assist in the delivery.

Contribution to the Pathology and Therapeutics of Leukæmia.

In an elaborate article on this subject in the *Zeitschrift für klinische Medicin*, 1888, XIV, 80–147, Sticker reports in fullest detail a fatal case which had been under observation eight months, and on which numerous scientific studies were made; and then discusses some of the symptoms of the disease. We may note that, as regards the blood, the case teaches that the increase or decrease in the number of the white blood-cells keeps pace with changes in the symptoms, except the constant growth of the spleen—or rather that it precedes them somewhat. This case further shows the greatest number of white blood-cells yet reported, equalling at one time 3,743,000, or a proportion of 1 : 0.5. The smallest number of red blood-cells in leukæmia is reported in a patient of Sorensen and Quincke, and equalled 500,000 in the cubic millimetre. The case of Sticker also confirms the statement that the number of the white blood-cells increases, as that of the red diminishes; and is against the oft-repeated assertion that there exists a diminution in the volume of the blood. There is rather a hydræmic plethora. The frequency of the pulse and of the respiration appeared to be nearly independent of the general condition of the patient. Toward the last, there existed a profuse bronchial catarrh, which was found to consist almost entirely of the "eosinophilous" cells; while, at the same time, the number of white blood-cells was found to have diminished decidedly, and it is almost certain that they were eliminated by the bronchial tubes. Priapism was present, as in many cases, but had certainly nothing to do with the genital function. No fatty degeneration of the organs was found which is in contradistinction to anæmia, and confirms Cohnheim's statement. The retinal changes, which were extensive, are detailed at length. Late in the affection, there was disease of the labyrinth of the ear.

The author made an elaborate investigation into the metabolism in his case, as shown by the analysis of the urine, and found that during the whole eight months it was abnormally great, and increased with the growing cachexia. Urea and uric acid were always in excess. The increasing number of the white blood-cells certainly has an important relation to the increased elimination of nitrogen. It is very probable that the degeneration of the liver which was present produced a diminution of the formation of urea, and an increase of that of uric acid; but it is certain that it was not able to paralyze the agents which would cause an augmentation of the first and a lessening of the second. The enlargement of the spleen had nothing to do with the increased excretion of uric acid.

As concerns the treatment, the author believes that the very marked improvement, which was seen for a time, was undoubtedly due to inhalations of oxygen; a case having been also reported by Kirnberger, in which recovery followed this treatment. This treatment may do good by supplying oxygen to white blood-corpuscles, which otherwise consume all they have before the tissues can profit by it. It has been proved that the leukæmic organism has a diminished oxidizing power. The rôle of arsenic in the therapeutics of leukæmia is not yet positively determined, and needs further study. Quebracho was of great benefit in this case in relieving the severe dyspnœa, and has been also recommended by Fleischer and Penzoldt.—*American Journal of the Medical Sciences*, July, 1888.

Formula for Saccharine.

M. Constantin Paul, at a meeting of the Therapeutical Society of Paris, July 25, 1888 (*Bulletin Médical*, August 19, 1888), said the following formula made a good elixir of saccharine:

Saccharine	℥ iss
Bicarbonate of soda	℥ i
Alcohol (at 40°)	f℥ iii
Essence of mint	gtt. xx

M. Sig. Coffeespoonful in a glass of water.

NEWS.

—The *Western Druggist*, Sept., 1888, says: Dr. Kauffman claims to have solidified petroleum by heating the oil, and adding to it from 1 to 3 per cent. of soap, which dissolves in the oil. The liquid, upon cooling, it is said, becomes like tallow, and is hard to light, slow to burn, and without smoke, but develops much heat. The petroleum is then available for fuel.

—The Colonial Surgeon of Hong Kong says the experience obtained in the Hong Kong jail is that the habit of opium smoking is far less deleterious than spirit drinking. Old confirmed smokers were found to have preserved a good appetite, and it was further found that the suffering attendant on the deprivation of opium, which is not allowed to anyone in the prison, was not more than in the case of a tobacco smoker deprived of his pipe.

—The Philadelphia *Ledger*, September 8, says: Dr. Sophia Jex-Blake, of the Edinburgh School of Medicine for Women, has successfully passed all the examinations of the Edinburgh Extra-Mural School before a committee of the conjoint Colleges of Physicians and Surgeons, and thus occupies the status of a lecturer on midwifery in the Extra-Mural School. It is believed to be the first instance of the admission of a woman lecturer on this branch in a public school.

—The *Medical Record*, Sept. 1, 1888, says: "A large number of soldiers in a regiment stationed in one of the French fortifications recently exhibited symptoms of poisoning by belladonna. An investigation undertaken to discover the source of the poison showed that it could not be in the water or wine drunk by the troops, for all the garrison had the same. In the absence of a better explanation, it was attributed to the eating of some unripe potatoes containing solanine."

—The *Medical Record*, Sept. 29, says that the Trustees of the Eastern Dispensary in New York City are about to hold examinations for the purpose of filling the following positions: One Attending Physician to the Department of General Medicine, one Attending Surgeon to the Department of General Surgery, and two District or Visiting Physicians. The Attending Physicians will be required to render two hours daily service at a salary of $400 per year, and the District or Visiting Physicians are to serve two and one-half hours daily at a yearly salary of $500.

HUMOR.

His Intention was All Right.—What an ardent prayer was that of the colored brother who besought the Lord to *an' int* his congregation with the "ile" of Patmos!—*Harper's Magazine.*

If your house is overrun with plumbers, the easiest and simplest method of extermination is to burn the house. To secure yourself, the house should be well saturated with insurance before the match is applied.—*Ledger.*

Where Ignorance is Not Bliss.—Emily. "Oh, Arthur, how cruel! See that poor worm wriggle!"

Arthur. "That's all right. I cut him in two first, so he's perfectly dead, only he hasn't discovered it."—*Harper's Magazine.*

A man who was cured of rheumatism by working around dynamos tells the *Electrical World* about it. He was knocked down very often by shocks, and was once unconscious for ten minutes. He thinks the worst case can be cured! The average sufferer would rather have the rheumatism.—*Ledger.*

Nothing Sharp to Cut With.—Young father: "Blamed if I know what's the matter with the baby, doc., but she cries all the time." Doctor: "Perhaps she has been cutting her teeth." Young father: "I don't believe it, doc.; she ain't had a knife or anything sharp to play with since she was born."—*Judge.*

Works Both Ways.—Customer (to boy in drug-store): "Have you anything for the removal of superfluous hair?" Boy: "Yes, sir; there's a bottle of our celebrated Hair Elixir. One dollar, please." Customer: "But that's intended to make the hair grow." Boy (whispering): "I know that's what it says on the label, but you take my word and try a bottle."—*Texas Siftings.*

One night recently a young man boarded an Albany steamer for New York with his mother, who had never traveled on water, of which she had a horror. The old lady's step became more and more tremulous as she approached the boat, and, after some hesitancy and expressions of her fears of seasickness, she was escorted aboard and safely deposited on one of the comfortable cushions in the saloon. Her son then left her, and, returning half an hour later, inquired how she felt. She answered: "I am deathly sick. Can't you do anything for me?" The son replied: "Mother, the boat has not yet left the dock." In imagination she had been tossing on the deep, but the son's reply cured her sickness.

THE

MEDICAL AND SURGICAL REPORTER

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Clinical Lecture.

RECURRENT PELVIC PERITONITIS.[1]

BY B. F. BAER, M.D.,
PROFESSOR OF GYNECOLOGY IN THE PHILADELPHIA POLYCLINIC.

Gentlemen: This patient is thirty-two years of age, and has been a widow two years. She has never been pregnant. The duration of the present illness is uncertain. Ever since puberty she has suffered more or less from the symptoms of which she now complains. She presented herself ten days ago, and stated that she was scarcely able to be out of bed, but being unable to employ a physician she felt compelled to go to a dispensary.

Her chief symptoms were sharp pains beginning in the left iliac region, deep-seated, and shooting across to the opposite side. She said the pain began with the onset of the last menstrual period, and that the flow was much more profuse than usual. Her menses usually last four days; at the last period the flow continued seven days, and was profuse, as stated. On questioning her it was learned that she had had numerous attacks of a similar character since puberty, especially in connection with the menstrual periods, and that of late years these attacks had been increasing in severity, the last one being the most severe she had had. The pain is at times almost unendurable. She becomes pale, and often during the attacks she suffers from nausea, and sometimes from vomiting. There is also some distension of the abdomen, with tenderness on pressure. The pain is less severe if she occupies the dorsal position, and she finds that bending the thighs upon the abdomen affords relief.

The question of differential diagnosis is an interesting one in a case of this character. You will note that the pain here is continuous and not intermittent in character, and that position and pressure increase rather than relieve it. If you will recall a case which we had in the clinic a week ago, you will remember that the symptoms somewhat resembled these, in the time of their occurrence—at the menstrual period—and in the sharp character of the pain. But in the former case there would be an attack of severe cramp-like pain in the centre of the hypogastrium or a little to the side, which would continue for a variable time, to be followed by a discharge of fluid or clotted blood, when there would be an interval of relief, to be followed by another attack. The pain was relieved by pressure; the patient stated that pressure gave her more relief than anything else, and that when the menses ceased she was apparently well. In the present case it is different. After the cessation of the flow the patient is unable to be about for days, and does not recover from the soreness and tenderness, but is more or less ill during the entire interval between the periods. In the first case we found stenosis of the cervical canal, and determined that the symptoms were due to obstruction in that canal so that the menstrual fluid could not readily flow out. We diagnosticated in that case congestive dysmenorrhea the result of stenosis. In the present case we found a different physical condition. The symptoms here are inflammatory in character and point to a local

[1] Delivered at the Hospital of the Philadelphia Polyclinic and College for Graduates in Medicine.

peritonitis, more especially of the left side, possibly, but not necessarily, involving the left ovary and tube. The pain of pelvic peritonitis is sharp in character and radiates from the affected side to the opposite, and often down the anterior portion of the limb, especially when the ovary and tube are involved. The symptoms here also resemble somewhat those of so-called ovarian neuralgia, except that in the latter case pressure relieves instead of increasing the pain; and the disorder is not attended by increase in temperature, and is not followed by exudation, although it usually produces nausea and vomiting.

This patient states that she began to suffer at the time of the occurrence of puberty; and on questioning more closely, we find that the symptoms at first resembled more nearly those of dysmenorrhea, the result of stenosis, due to an imperfection in development. They have since, however, gradually changed to their present character, which I ascribe to pelvic peritonitis; and as the trouble recurs with the menstrual period or from other cause, the disease has been properly termed "recurrent pelvic peritonitis." It recurs for the reason that the original cause and its consequences are still active.

It is probable in a case of this character that there is more or less inflammatory action with every period of ovulation, which is relieved or modified by the occurrence of the menstrual flow, which depletes the congested vessels and ends the process for the time. At the following period there may be an attack just as severe, and each succeeding attack may be more severe than the previous one, until the patient becomes so ill that she is compelled to call her physician; when, if an examination is made, it may be discovered that the uterus is only moderately fixed from a slight film of exudation on the peritoneal surface, or the exudation may be so great as to present a hard, board-like sense to the touch; or indeed the peritoneal pouch may be distended by an exudation so large in quantity as to present a well-marked tumor, such as we find in this case. The tumor formed in these cases is without shape, or rather it is not circumscribed by a smooth wall as in fibroid or ovarian tumor, but rather takes the shape of Douglas's pouch or the post-broad-ligament space. It is usually a little thicker below than above, but the general shape is flat. Both the ovary and the tube of the affected side may be involved in the inflammatory condition and surrounded by the exudation. In that case the tumor would be of somewhat different character. It would be larger, and probably circumscribed, but still irregular and fixed.

It has been said that this disease always begins as a vaginitis or endometritis, and extends to the Fallopian tube, finally involving the ovary and peritoneum. When abscess of the tube or ovary is found to exist in connection with the peritonitis, the origin is usually ascribed to gonorrhœal infection; when not attended with the formation of pus it is still said to be due generally to some septic material, non-specific or otherwise, admitted through the same channel.

There can be no question that this is true in many instances, probably in the majority of cases; but I believe it is also true that the disease often arises from traumatism, the result of congestion from interference with the menstrual flow, such as occurs from obstruction in the cervical canal, from stenosis or flexion of the uterus. The injury may also arise from coition, or from an external blow; or from cold, resulting in suppression of the menses. Obstruction in the cervical canal may result in regurgitation of menstrual blood through the Fallopian tubes into the peritoneal cavity. The obstruction may also be in the tube itself as the result of malformation of that organ; or the narrowing may be from inflammatory or other cause. Again, there may be such malformation of the fimbriated extremity of the tube as to prevent its grasping the ovary at the time of the rupture of the Graafian follicle. In the latter case the contents of the follicle would be discharged into the peritoneal cavity, and might result in the development of peritonitis. Early rupture of an extra-uterine gestation sac is another traumatic cause.

We must explain the development of the peritonitis in some cases from causes other than specific or infectious. This patient, for instance, first complained when she began to have her menses, and I do not think it would be scientific to jump to the conclusion in cases such as this that the disease was of gonorrhœal origin. It is not likely that at the early age of puberty a specific cause existed, and it would be unjust to the patient to ascribe it to that origin. It is more likely that the origin of the disease in this case has been in one of those developmental or traumatic causes enumerated above.

But whatever the cause, when called to a case of this character, you should at once make a physical examination, for the purpose of determining the locality and extent

of the disease, so that a proper treatment may be adopted. The patient should be at once placed in bed, for rest is one of the prime factors in the management of the case. If great pain and tenderness exist, a hypodermic injection of morphia should be administered. This will relieve the pain and facilitate the examination. If the necessary manipulation cannot be made without it, ether should be administered. The question to be settled first is the diagnosis, and I wish here to impress upon you the necessity of gentle manipulative measures, for I do not think there is a doubt but that many cases have been injured and made worse by a rough and awkward examination. First administer an antiseptic vaginal douche for the protection of both the patient and yourself, and see to it that your hands and instruments are rendered aseptic by thorough washing and emersion in an antiseptic lotion before they are used.

This patient was examined at her first visit ten days ago, and I found the uterus moderately fixed. On the left side and in the post-broad ligament-space there was a semi-solid mass of lymph extending into Douglas's pouch, flattened in shape and quite tender on pressure. It was not nodular, and seemed to become thin toward the upper portion, and to be of the general shape which you might imagine would be given to liquid glue or plaster of Paris which had been poured into a mould shaped somewhat as the post-uterine space is. I made a diagnosis of recurrent pelvic peritonitis, and ordered the patient to bed. I also ordered certain medicines, the first and most important of which was a saline laxative. For the relief of pain she was given a vaginal suppository as follows:

℞ Morphinæ sulph. . . . . gr. iii
Ext. Belladonnæ . . . . gr. iii
Ol. Theobromæ q. s.
M. et ft. supposit. No. vi.

Sig. One, morning and night for pain, if necessary.

She was also ordered the following mixture, to be used as a local application over the painful region.

℞ Tr. Aconiti rad.,
Tr. Opii . . . . . aa f℥i
Tr. Iodi . . . . . f℥vi
M. Sig. POISON. For *external* use only. Apply with brush to painful surface as directed, twice a day.

She was requested to paint the affected area with this mixture very thoroughly twice a day. The next most valuable remedy in a case of this character is the hot water vaginal douche, but it was omitted here because of the fear that it would not be administered properly, and might consequently result in more harm than good.

The patient was seen several times in the interval. She reports to-day that she is better, and that the pain has almost entirely disappeared. This will enable us to make a more thorough examination, and if possible, determine the cause of these recurrent attacks. The patient is placed in the dorsal position, and with the left index finger well warmed and lubricated I will proceed to make the examination, and describe to you the condition which I now find. In the first place, I am glad to be able to state that the semi-solid exudation tumor in the post-broad ligament-space, which was found at the first examination ten days ago, has almost disappeared; but in its place there is a hardened, irregular mass, which renders the tissues in this region fixed and rigid. I now place the fingers of the right hand on the hypogastrium, and by the conjoined manipulation which is permitted to-day, because of the absence of great tenderness, I am enabled to explore the post-uterine space more thoroughly. I discover in Douglas's *cul-de-sac* an indurated mass, irregular in shape, which is simply an extension of that which exists in the post-broad ligament-space. I am unable to outline the ovary or Fallopian tube, or any circumscribed or cystic condition resembling disease of those organs. I infer, therefore, that they are probably not involved in the inflammatory process.

I find on examination of the cervix uteri that that organ is somewhat enlarged, and that the os is very small—so small, indeed, that I can scarcely detect it with my finger. The body of the womb is also enlarged and firm, but it is mobile, only the cervix being fixed by the indurated exudate described a moment ago.

The absence of the semi-solid tumor which I discovered at her first visit, does not prove that I was wrong in my diagnosis, but simply that the serous portion of the mass has been absorbed, leaving the indurated irregular condition of the exudated material, which we find to-day. That is the history in these cases. Nature attempts, as soon as the inflammatory process has reached its height, to restore the parts to their normal condition by resolution of the exudate; but nature only partially succeeds, for another attack usually supervenes and arrests the process. Another attack supervenes for the reason that the original cause still exists, and also because the remains of the previous attack serve as an abiding stimulus to a

recurrence. The original cause of the disease in this case I believe to have been contraction or stenosis of the cervical canal, as described.

What will be the proper course of treatment in the present case under the existing circumstances? Will it be proper for me to begin at once a treatment for the purpose of rendering the cervical canal patulous, so that the menstrual fluid may escape naturally? If that means dilatation, I say emphatically No, for the manipulative measures which are necessary for the performance of the operation of dilatation would very probably cause a renewal of the disease.

As a rule patients who suffer from chronic pelvic peritonitis, which this practically is, are more or less broken in general health. They are more or less the subjects of nervous exhaustion, indigestion, anemia, and loss of flesh, as a result of the long suffering endured during the course of the disease. I believe that here the most efficacious plan of treatment is that which embraces REST as its guiding principle. It is unquestionably true that when the patient is allowed to exercise and follow her usual vocation, the attrition of the inflamed surfaces upon each other will tend to keep up the inflammatory condition. It is best, whenever it is possible, to remove the patient from the cares of her home, so that she may have mental as well as physical rest, free from domestic cares and especially from the marital relation. A general regimen, similar to that which was introduced by Dr. S. Weir Mitchell for the treatment of nervous exhaustion, and which consists of seclusion, rest, and diet, together with massage and general electricity, is the one which is most beneficial in these cases, whilst the local treatment which is necessary is being carried out.

Strict attention should at once be paid to the condition of the bowels, for constipation is one of the most troublesome accompaniments of pelvic peritonitis. I believe it often stands in a causative relation, and nearly always as a complication of the disease; first attention should be paid to the relief of this condition. Strict attention should be paid to the diet, and the food should be of the most nutritious character.

The local treatment should embrace those remedies which are thought to possess the power of stimulating the absorption of plastic material, either by a counter-irritant or stimulating action. The persistent and free use of the tincture of iodine, both to the hypogastrium and the fundus of the vagina, is of great value. But iodine alone is sometimes found to be so irritating to the skin as to make it necessary to discontinue its use; for that reason I am in the habit of prescribing the formula as given above, consisting of the tinctures of aconite and opium in addition to the iodine. This may also be applied to the fundus of the vagina instead of the iodine alone, either with a camel's hair brush or with the cotton-wrapped applicator. The vaginal application of the iodine should be made not oftener than every three days, and sometimes a longer interval is advisable, especially if the remedy is used in a concentrated form. If it is found that too much irritation has been produced its use must be discontinued for a time, and then remedies of a milder form may be substituted, such as the boroglyceride, or iodoform and glycerine, one drachm to the ounce, or glycerine alone may be used.

The remedy which I consider next in value to iodine, if not indeed preferable to it, is the hot water douche. But this remedy is liable to be abused when placed in the hands of the patient herself. It is a remedy the use of which should not go out of the hands of the physician or his trained assistant, the nurse. When administered by the patient herself the water is either used at too low a temperature or in too small quantity, or both. Further, she becomes tired of the pumping and of the position which she must assume, and fails to keep it up during the length of time required for the injection of the quantity usually advised—a gallon or two. The constrained squatting position is in itself injurious. I believe that the long continued use of warm water is followed by relaxation of the pelvic organs, and this would constitute another objection to the indiscriminate recommendation of this measure; for when it is placed in the hands of the patient, she is likely to continue its use for too long a period and after the indications for its use have disappeared. The remedy must be used in accordance with fixed rules, and under certain restrictions, and these I would class as follows: First. The patient must be in the recumbent posture, and in the dorsal position. Second. She must not administer the douche herself. Third. The water must be at a certain *high* temperature, which is best determined by the sensations of the patient. It should be as hot as can easily be borne, and the temperature gradually increased during its administration, for the patient will be able to endure it at a higher temperature after the current has been flowing a few minutes than when it is first begun.

I believe the douche is better than pumping, by Davidson's syringe for instance, because the application is more likely to be thorough and the effect to be maintained longer. For, even when the injection is given by the physician or nurse, the hand is liable to become tired of the pumping and the application stopped, for a time at least. It is the continuous application of the remedy which is most beneficial. For use in my private hospital, I have had made a tri-pod, five feet in length, with a hook in the center on which a bucket is easily hung. The bucket holds two gallons of water, and near the bottom is placed a stop-cock, to which is attached a tube provided with a nozzle and a stop-cock at its distal end.

The patient is placed on a bed pan, which I have modified after that devised by Meriman. The nozzle is then introduced into the vagina, and the stop-cock at the bucket turned by the nurse, the water being at a temperature of at least 110° F. The patient can then regulate the flow herself. The water is allowed to enter the vagina, dilating it, and flowing off slowly, so that the tissues are in a continuous hot bath, which can be kept up as long as desired—from ten minutes to half an hour or longer—care being taken to see that the proper temperature of the water is maintained by the addition of a fresh supply from time to time. The important point is not so much the amount of water, as its temperature and constant contact. The application of this remedy should be made once or twice a day, depending on its effect upon the patient.

Recently I have been using "Gordon's Utero Vaginal Irrigator." This instrument does away with the necessity of the pan, which is a great improvement. The mechanism of the instrument is simply the placing of a bulb similar in shape to that portion of Davidson's syringe which is used for the pumping. This bulb is placed near the end of the vaginal nozzle; its position, therefore, is in the orifice of the vagina, filling that space so that the water cannot escape except through a return tube which passes through the bulb. To this return tube a piece of rubber tubing is attached of sufficient length to conduct the water into a receptacle on the floor. With this instrument the water can be used at a much higher temperature, because it does not come in contact with the surface at the orifice of the vagina, which surface is more sensitive to the heat than that within the canal. Then another great advantage is the getting rid of the necessity of the pan. With these precautions in its administration, hot water is one of the most valuable remedies which we possess in the treatment of pelvic inflammations, and great credit is due to Dr. Emmet for introducing it and his persistence in keeping the remedy before the profession.

After all tenderness has subsided, much may be accomplished by gentle massage of the adherent pelvic organs, but great care and gentleness are necessary in the manipulation for fear of producing such irritation that the inflammatory process may be renewed. Then it is very necessary that organic disease of the Fallopian tubes and ovaries should be excluded before massage is begun, for if pyosalpinx or abscess of the ovary should exist and be overlooked, rupture of an abscess might result from the manipulation.

Before massage is begun, the patient should be placed across the bed, the hips resting a little over its edge and the feet placed on the knees of the operator. This relaxes the abdominal muscles, and gives greater control of the patient, so that the necessary manipulation may be thoroughly carried out. One or two fingers of the left hand should now be introduced into the vagina, while the fingers of the right hand are placed upon the hypogastrium; then the contracted ligaments, thickened membranes, and fixed uterus, ovaries, and tubes should be gently manipulated, and moved from side to side, or upward and downward, care being taken that the force used is not sufficient to lacerate adhesions, or even to so stretch them as to cause undue irritation. The proper amount of force is probably best regulated by the sensibility of the patient, and if pain is produced by the manipulation it should not be persisted in. This massage may at first be employed at intervals of two or three days, but later it may be used almost daily for a time. By this method it will almost invariably be found that the adhesions become attenuated and in many cases finally absorbed. On the other hand, in long-standing chronic cases, the adhesions may be of such size and strength that months may be required to produce any marked effect; and in rare cases the adhesions may be of such character as to be permanently organized, and almost incurably to fix the organs. Here operative measures of a nature to be described in a future lecture may be necessary.

In these marked chronic cases I have found, in addition to the massage, that

stretching of the fundus of the vagina, by firmly packing it with antiseptic wool, sometimes repeated daily, or at intervals of two, three, or four days, is of great benefit in overcoming the condition. The small rubber colpeurynter, distended with hot water, is a very efficient means of accomplishing the stretching, and I have used it with great satisfaction in some cases.

It has been advised that continuous pressure and stretching of adhesions be made by means of a large pessary; but I would strongly urge against such practice, for I do not think that good ever comes from it, and it is certainly often attended with harm.

There is another means of stimulating absorption in these cases of pelvic exudation which is now attracting considerable attention. That is electricity, both by the galvanic and Faradic currents. I have been using Faradism during the last few years in many cases of this character with benefit, and during the last year I have been using galvanism. This I have found to be of value in stimulating the absorption of exudated material. I think that it will eventually take a prominent place, when properly understood and properly applied, in the treatment of these cases, as well as in the treatment of fibroid tumors. There is no doubt as to the power of the strong galvanic current, applied according to the advice of Apostoli, to modify the nutrition in fibroid tumors, and generally to ameliorate the symptoms. I have had some marked cases to support these views. The same will apply to cases of pelvic exudation, and, I believe, also to some cases of disease of the tubes and ovaries which have not advanced to the formation of pus. Where pyosalpinx and abscess of the ovary exist, the only remedy is the removal of the diseased appendages by laparotomy. But I wish here emphatically to state that I do not believe that pelvic peritonitis is always the result of endometritis or salpingitis, nor that removal of the appendages is always necessary to effect a cure. I learned early in my experience the great value of prolonged rest and thorough local and general treatment in these cases. Benefit always follows, and in many cases a cure. As much cannot be said for removal of the appendages. In many instances removal of the tubes and ovaries in these cases does not. cure the patient. I have, at the present time, under my care, for the same symptoms of which they complained before the operation, two of my own cases and several that have been operated upon by others. If that is the experience of one individual, it is probably the experience of all, and will swell the number of uncured cases to many. Do not understand me to say that I am opposed to the removal of incurably diseased uterine appendages, which cause great suffering to the patient, after other proper means have been used to effect a cure; for I am an advocate of the operation in such cases, as you have seen. But I plead for conservatism and due deliberation, and the exhaustion of means which do not subject the patient to an operation which is attended with danger to her life, and by which she is unsexed, so far as fertility is concerned; for many cases will get well without an operation, if time is given and skilful treatment faithfully pursued.

COMMUNICATIONS.

SULPHONAL; THE NEW HYPNOTIC.

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In the treatment of mental and nervous disorders it is of great importance to possess for insomnia a remedy of which sleep is the predominant physiological action. The medical profession has been waiting anxiously for the ideal hypnotic, and it seems as though the new German drug sulphonal approaches, in its effects, nearer to the ideal than any other of the recently discovered substances with which the modern, and especially the German chemists have filled the market. The claim to superiority of this new substance is that it has little if any physiological effect upon the vast majority of insomnious persons, except the important one of increasing and prolonging the natural tendency to sleep. Its action is said to be not in the least narcotic, but purely hypnotic. It is claimed for it that the pulse, pupils, temperature, respiration, appetite and secretions are unaffected, after its continued daily use, for an indefinite period; and that, finally, it is promptly eliminated from the system, principally by the kidneys, without irritation or detriment to those organs. It is a crystalline, white substance, with a slight tendency to effloresence when exposed to the atmosphere, and is readily pulverizable, emitting, only when strongly triturated, a slight odor of sulphur; it is almost wholly tasteless, producing no dryness in the throat, and no unpleasant after-taste. It somewhat resembles urethan in appearance, and is formed in the process of the oxidation of

acetone in the presence of sulphur, and hence the odor when it is warmed or rubbed. Sulphonal is singularly insoluble in the potable solvents, such as water, the dilute acids or dilute alkaline solutions, or very dilute alcoholic fluids. It is soluble in a mixture of two parts of alcohol (ethylic, 95%) and one part of ether; but this is not potable, and any dilution of this with water precipitates the sulphonal.

In the estimate of the therapeutic value and effects of a drug, surely water is the only fair solvent, and if it cannot be a solvent, then it should be at least the vehicle employed, if it is desirable to exhibit the drug in a liquid form.

Sulphonal may be administered in powder, or a dose of the finely powdered substance may be suspended in three or four fluid-drachms of cold water, by means of gum arabic and syrup. This mixture should be thoroughly shaken before it is used, and but one dose prepared at a time, as the sulphonal rapidly settles to the bottom of the container.

The name sulphonal is composed of syllables picked out of the word which expresses its chemical composition—diæthyl-sulphondimethylmethan. Its actual solubility is in the proportion of one part to about one hundred parts of cold, and one part to eighteen or twenty parts of boiling water (which, of course drops it as it cools). It is unaffected by acids, alkalies, or oxidizing agents—a very stable compound. The following is its symbol—$(CH_3)_2.C(C_2H_5.SO_2)_2$. This substance was discovered and named by Prof. Baumann, who with Prof. Kast of Freiburg, tested its physiological action first on dogs, afterward upon normal human beings, finally upon insomnious persons, insane and otherwise. Their clinical observations proved that in doses of from two to three grammes (30 to 45 grains), given to persons in health, it produced lassitude, hebetude, sleepiness: when given in the same doses to persons suffering from nervous and febrile insomnia it produced a sound and refreshing sleep of from five to six hours duration, within from one-half to two hours after its administration. Subsequently, Prof. Cramer and Dr. Rabbas obtained similar results in a series of clinical observations upon insane patients in the Marburger Irrenheilanstalt. In no instance was its effect unpleasant or dangerous and it did not produce any evil after effect upon the circulation, respiration, appetite, digestion, secretions or excretions. The pupils and vision remained unaffected.[1] "Although somewhat slower in taking effect than chloral hydrate, the action of Sulphonal is more prolonged. Doses of two to three grammes proved safer and more effective than proportionately larger doses of amylene hydrate. Another peculiar and valuable attribute in sulphonal is that the prolonged use does not weaken its physiological effect; nor does it produce the desire for a narcotic that makes the use of chloral (and some other drugs) so dangerous. Additional and general investigation which will follow its introduction, will, no doubt, verify the above outlined observations, and insure the popularity of this new hypnotic."

The papers of Prof. Kast and of Dr. Rabbas were published in 1888, in the *Berliner klin. Wochenschrift*, April 16 and 23. Rabbas (see REPORTER, June 23, p. 823) considers it more desirable than paraldehyde or amylene hydrate, and as compared with chloral hydrate, sulphonal is less prompt and less profound, but more lasting in hypnotic effect. There is an unusual unanimity of opinion among all the investigators as to the merit of the new drug, and further evidence of clinical and physiological work will be found, as follows:—that of Langgard and Rabow, in the *Therapeutische Monatshefte*, for May, 1888; of Salgo in the *Wiener med. Wochenschrift*, No. 20; of Rosin, in the *Berliner klin. Wochenschrift*, April 30; of Œstreicher, *Ibid.*; of Cramer, in *Münchener med. Wochenschrift*, June 12, 1888, page 395; of Schwalbe, in *Deutsche med. Wochenschrift*, June 21, 1888, page 499, and of Rosenbach, in *Berliner klin. Wochenschrift*, June 11, 1888, page 481. Œstreicher thinks it better to give the dose several hours before bed-time, as it is rather slower to act than some of the other medicines of this class; but he found it none the less reliable in his hands, especially among the insomnious insane. Cramer's cases were all of the latter class. In 407 trials on 92 insane subjects he had "positive success" in 92 6 per cent.—*i. e.*, from 5 to 9 hours of unbroken sleep, occurring in about a half-hour after its administration. He had not an instance of unpleasant effect, "though in one case one ounce in six days, and in two others forty-five grains daily, for two months, were given." The published investigations of Schwalbe are of especial value and reliability, as they seem to have been thoroughly exhaustive and very carefully tabulated. He selected 50 patients, ill of various physical and some of mental diseases and disorders, all insomnious, and obtained a "prompt

[1] Notes on New Remedies, for June, 1888.

and satisfactory" hypnotic effect in 66 per cent.; a "relatively poor" result in 24 per cent., and a "negative" result in but 10 per cent.; but what is of especial value from our point of view is the fact that of 24 cases of purely nervous insomnia, success was complete in 90.3 per cent.

To such cases it seems best adapted, for in instances in which the sleeplessness was the direct result of pain or of decided irritation, success attended his efforts in but 44.4 per cent. Schwalbe agrees with the original observer Kast, that sulphonal is purely hypnotic, not narcotic. It seems decidedly most valuable in perturbed nervous and unbalanced cerebral conditions; but in no sense does it overcome insomnia the result of considerable pain or topical irritation. It does not, for instance, either diminish or allay the nocturnal cough of phthisis or bronchitis. Contrary to the experience of Kast, Schwalbe found it did not relieve cardiac dyspnœa. In but 12 per cent. of all cases investigated were there any ill effects, and these were confined to slight headache, or to transient vertigo. Schwalbe's experience with it in children was most satisfactory, in the dose of four grains. In male adults he gave it in doses of from fifteen to thirty grains; in female adults in less doses, from twelve to thirty grains; but in many adults of both sexes, much larger doses, from thirty-five to fifty grains were well borne, but were seldom necessary.

In the Department for Females, of the Pennsylvania Hospital for the Insane, its assistant physicians have been observing carefully its action upon a group of 8 patients with mental disorder, all of whom had been very insomnious persons; *all* resisting the sedative and hypnotic powers of the bromides, paraldehyde, urethan, tinct. hyoscyamus and valerian. Four of them resisted chloral hydrate and opium, in usual doses: all of them were controllable (i. e. slept) by hyoscine hydrobromate. All of this group are examples of subacute or chronic mania, melancholia or dementia; and all were much accustomed to the use of sedatives and narcotics, and always have to have "night medicine." *But one moderate dose* of sulphonal, suspended in water by means of gum arabic and syrup, was given to each patient about an hour before bedtime, and in no instance was the dose repeated later in the night. The group slept under intelligent observation.

The effects were carefully noted, and reduced to a tabular statement. The medicine was administered 230 times to these 8 individuals, an equal number of times to each. In every case but one, the dose was fifteen grains. In that case (one of well-known resisting power) the dose was twenty grains. The results were as follow: An excellent effect, *i. e.*, from 5½ to 9 hours of continuous sleep, in 196 instances, or 86 per cent. A fairly good effect, *i. e.*, from 4 to 5 hours of continuous sleep, in 15 instances. An imperfect effect, *i. e.*, from 2 to 3½ hours of continuous sleep, in 9 instances, and no hypnotic effect in 10 instances.

It is gratifying to note the general improvement which attends the regular nightly sleep produced by such a singularly harmless drug as sulphonal appears to be. In no instance has its administration (for many continuous nights) been followed by unpleasant effects. The patient rises with the usual appetite, free from headache or vertigo. In no instance did it produce an appreciable effect upon the pulse, temperature, respiration, skin, kidneys, or pupils. The digestion of food was not impaired by its regular use. Its sole appreciable physiological action was *sleep*, usually very restful and prolonged.

Now, if it has been used with so much good effect in overcoming the insomnia of chronic hospital cases of insanity, which have been plied with various sedatives until their susceptibility to the power of drugs is much weakened, and their power of resistance strengthened, how much more sleep-producing effect would a less dose induce in the simply nervous and weary or overworked and irritable nervous system? Would it not be also very valuable in the insomnia of disease of which severe pain is not a factor? Sulphonal will not ease pain, nor will it induce sleep when pain is present as a continuous sensation; but it will allay nervous restlessness, vigilance and excitement.

In regard to dosage, male adults require, as a rule, considerably more than adult females. Our commencing dose with the latter was eight grains, which was soon increased to twelve grains; but these doses were generally found insufficient, and further experiment proved the average effective amount to be fifteen grains, though there need be no fear in increasing the dose, if required, to the amount of from thirty to thirty-five grains. These observations were conducted with care, and are being continued. The results obtained in three members of the group referred to were from observations made by Dr. Henry B. Nunemaker, the remainder by the writer.

AN UNPREMEDITATED CÆSAREAN SECTION.

BY WILLIAM VARIAN, M.D.,
TITUSVILLE, PA.

On July 17, 1888, I was visited in my office by a medical practitioner of extensive practice, over thirty years experience, and considerable local reputation as a surgeon, and one who had been surgeon of a regiment in active service throughout the war of the Rebellion. He stated that he had a patient with an ovarian tumor, who, he thought, demanded operative treatment; and that he had referred her to me, as he himself did not do abdominal surgery. The doctor said he was well assured of his diagnosis, and had had the patient more or less under medical supervision for some months, although he had just arrived at the conclusion that she was suffering from an ovarian tumor. As this was not the first case of abdominal tumor referred to me by this physician, and as I had found his diagnosis on former occasions correct, I had no reason to doubt his diagnostic skill.

I saw the patient on July 18, and obtained the following history. She had been ailing for eleven months, suffering principally from distress and pain in the right iliac region. During the earlier months she had been nursing an invalid mother, and thought that her distress was due to the lifting and fatigue incident to her occupation. She first became conscious of an enlargement on the right side of the abdomen in April. It steadily increased, and during the past few weeks had been growing rapidly. Menstruation was regular in period and in duration, although less abundant than it had been a year ago. This statement was confirmed by an aunt who was present and who did the family washing.

The patient had never suffered from nausea or any disturbance of the stomach. Functions of the bowels, kidneys, and bladder had always been normal. She had never been obliged to rise at night to empty her bladder, except once, a week before my visit, when she had been feasting on watermelon during the evening. No frequent micturition during the day at anytime during her ailment. Her appetite and digestion had always been good; she had lost flesh rapidly of late, especially in the face and shoulders, and had never felt any abnormal sensation in the abdomen—no starting or jumping; no movement nor any sensation other than the pain and distress low down in the right side of the pelvis and region of the right ovary. Her breasts had always been large, and had not increased in size so far as she was aware; nor was there any darkening of the nipple and areola.

This was the history as obtained from the patient and her family. The young woman was thirty-three years old, bright and intelligent, a member of the Baptist Church, and held in high esteem by prominent and wealthy members of that congregation. Her answers to my questions were prompt, clear, and free from any apparent reticence. Neither in countenance nor in manner was there anything which would lead to a suspicion that her frankness was assumed.

The physical examination was made with the patient clothed only in her night-dress. The abdomen was about the size of a woman in the eighth month of pregnancy. The enlargement was principally on the right side. Palpation and percussion gave all the signs of an encysted dropsy. No thickening and enlargement or solid portion could be detected. Auscultation gave absolutely negative results. On vaginal examination I found the os rather long and firm, and was unable to reach the junction of the body and neck so as to trace the continuity of the two. The pelvis was filled above the brim with a fluctuating mass, which by combined abdominal and vaginal examination gave all the signs of a pure cyst. I had some difficulty in passing the uterine sound. The sound passed only 3¼ inches, and, when moved, apparently carried the womb with it. My diagnosis was cystic tumor of the right ovary. Two subsequent examinations during the following week, which were confined to abdominal palpation and percussion, gave no reason to change the diagnosis; and further questioning did not elicit anything to raise a doubt.

On July 30, 1888, I operated, with the assistance of Drs Barr, Young, and Luke, of this city. On reaching the cyst and evacuating a large amount of fluid, I discovered that it contained a fœtus. I promptly enlarged the abdominal opening, incised the uterus, and delivered a living child, which was presenting by the breech, and was evidently an eight-months fœtus. I rapidly removed the placenta, dilated the os from within with the index finger, and closed the incision as quickly as possible with silk sutures closely approximated, avoiding the mucosa. After perfecting the toilet of the abdomen, I closed the abdominal wound with silver sutures, inserting a

glass drainage tube in the lower angle, and dressed the whole aseptically.

The next day some blood was withdrawn from the tube, and the abdomen thoroughly washed with warm sterilized water. The following day the drainage tube was withdrawn, as all oozing had ceased. Eight hours after the operation the temperature rose to 101° F., and the pulse stood at 110. The next day, at 8 A.M., the temperature was 99 3-10° F., and pulse 100. From this time on both pulse and temperature were normal. Convalescence was uninterrupted, and on the twenty-first day after the operation the patient rode out in a carriage.

The child throve at first. There was a total absence of milk secretion. The child was fed artificially, and on the fifth day very *injudiciously* and in exact opposition to orders. A severe diarrhœa was the result, to which the infant succumbed on the seventh day.

The intense mortification felt by me at my error in diagnosis is but little modified by a successful Cæsarean section. That I was deceived by a breech presentation, unusual development of the amniotic fluid, an anomalous condition of the os uteri, and wilful misrepresentations on the part of the patient is more apparent to me than it will be to my critics. It is no consolation to know that other and more experienced members of my profession have met with similar experiences. Yet I freely present my mistake to the profession, that others may learn that it is not impossible even for the experienced surgeon to be deceived.

I failed to recognize the uterus when it was first reached partly because of its pallor, of the smallness of the exploratory incision, because of my inability by digital examination, after the cyst was reached, to detect anything but fluid contents, and perhaps still more because only four weeks before this operation I had successfully removed an ovarian cyst which so closely simulated a pregnant uterus in appearance that nothing but an unnecessarily large incision enabled me to decide that my original diagnosis was correct. My experience in this case satisfies me that the Cæsarean section is no more to be dreaded than other laparotomies, if opportunity is afforded to elect the time of operation.

—Dr. Frank P. Fry, says the *St. Louis Med. and Surg. Journal*, October, 1888, will occupy the chair of Anatomy in the St. Louis Medical College, made vacant by the death of Dr. B. J. Primm.

TREATMENT OF DYSMENORRHŒA BY MENTAL SUGGESTION OR HYPNOTISM.

BY ARTHUR C. HUGENSCHMIDT, M.D.
(UNIV. OF PA.), PARIS, FRANCE.

The following cases pertaining to the subject of gynæcology have occurred in my practice during the past year, and have been treated successfully by this method.

Case I.—Young woman, 27 years old, menstruated for the first time at the age of 11 years; since then her menstrual periods have been very regular, but each one of them is accompanied by a great deal of pain. Five or six days before the appearance of the flow, she has the usual unpleasant feelings described by most patients; but two days before, the pains become terrible, unbearable, the patient being compelled to lie down. These pains are situated in both ovarian regions, are very severe, and shoot down from each side into the corresponding thigh; they are accompanied by severe vomiting and headache. These symptoms last until the appearance of the flow, when the patient looses a great deal of blood, and then the pains disappear. From the train of symptoms alone, some organic malformation of the uterus or displacement of the same could be suspected; still I made no examination as different treatments had been tried before without success. I proposed to try the influence of mental suggestion.

This being assented to, both by the patient and her parents, I began the extremely short treatment in December last. On my first attempt to hypnotize her, I obtained no result by making her look at a diamond ring; on the second day, however, using the same method I obtained a better result, a light sleep, which is all that is necessary for the purpose. While the young woman was in this condition, I contradicted every one of the symptoms, which had been described to me, saying, "that she would have no more pains, no more vomiting, no more headache before, during or after her menstrual periods, that she was now entirely cured; she was then restored to consciousness.

At her next menstrual period, which came on a few days later, she felt perfectly well, had no pain, no headache, and no vomiting. The cure has persisted up to the present day; she has had no more return of her troubles and remains perfectly regular. In this case, these severe symptoms had lasted continuously for sixteen years; and five minutes time has been sufficient to effect a cure.

Case II.—In May last, I was called to a young woman, 25 years old, who complained of a very severe pain in the right ovarian region; the parts were painful to pressure. She had been in that condition for two days, and could walk about the room only with great difficulty, as any movement of her right limb would increase the pain; the symptoms present indicated a probable congestion of the right ovary.

Hypnotism was proposed as treatment and accepted; in this case, sleep was obtained by asking the patient to fix her attention upon my index finger; it took me about four minutes to place her in the proper condition, which is, as stated before, a slight hypnotic sleep. When in this state, I told her that the pain in her right side had disappeared from this moment; that she would be able to move her limb and walk about the room without any aid. On awakening, the patient stood up, began to walk, moved her right limb freely, and said she did not feel the least pain. Since then, these pains, which before would come on occasionally, have not returned.

Case III.—A young woman, 28 years old, menstruated for the first time when 12 years old; the menstrual period is very irregular in time, but not painful. When 19 years old, without any known cause, her menses suddenly disappeared. This amenorrhœa lasted one full year; then her menstruation appeared again. irregularly as before, but is now accompanied at every menstrual period by severe pain and vomiting.

The symptoms were as follows: three to five days before the flow, a general sense of lassitude, swelling of the breasts, and the ordinary signs of approaching menses; the flow then makes its appearance, and only three to four hours afterward do these extreme pains come on. They are, as in the first case, a double ovarian pain, extremely severe, extending down both thighs; the severity of those pains produces a general coldness of the surface of the body. In addition there is severe vomiting, but no headaches; these extreme pains last from six to eight hours, during which time the patient remains in bed, the legs flexed on the abdomen, especially the left one. Poultices produce a certain amount of relief. I hypnotized this patient in less than two minutes, she being a perfect subject. It is needless to say that a third person must always be present during this treatment—one of the family, especially if a young woman is the patient. As in the preceding cases, I announced the disappearance of the ovarian pains and vomiting at the next menstrual period, as well as the complete cure of the patient. Three days later, the patient menstruated, but experienced no pain whatever, and no vomiting; she felt bright and happy during the whole menstrual period. It is only two weeks since her last illness, but I have no reason to suppose that this patient will be cured in a less degree than the two preceding ones. I must add that these three patients were all well educated and very intelligent; hence the suspicion of having had to deal with persons of a low intellectual power is out of the question.

The method of treatment by mental suggestion is a very easy one, and does not, as is erroneously supposed, require a supernatural power on the part of the physician; any practitioner, who will study the subject, can do as well as any man living who uses this process.

Society Reports.

AMERICAN SURGICAL ASSOCIATION.

ANNUAL MEETING, AT WASHINGTON, D. C., SEPTEMBER 18, 19, 20, 1888.

Tuesday, Sept. 18, Morning Session.

The Association was called to order at 10 A. M., by the President, Dr. D. Hayes Agnew, of Philadelphia.

The first business was the delivery of the President's address, which was published in the Reporter, September 22.

The next paper was

A Contribution to the Study of Excisions of the Larger Joints,

by John Ashhurst, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania, Surgeon to the Pennsylvania Hospital and to the Children's Hospital, Philadelphia.

(ABSTRACT.)

The remarks which follow are based upon the records of 120 cases in my own practice in which excisions of the larger joints have been required, and will refer especially to the operative method, the after treatment, and the functional value and limitations of applicability of excision in the case of each articulation. The 120 cases embrace 4 of shoulder joint, 19 of elbow joint, 40 of hip

joint, 51 of knee joint, and 6 of ankle joint excision.

Shoulder Joint. My four cases of shoulder joint excision have all terminated successfully; they all occurred in adults, three times in young persons, and once in an old person. The only case of special interest was that of a young married woman, aged 30, admitted to the hospital in a very prostrate condition, with acute necrosis of the left humerus and consequent pyarthrosis of the corresponding shoulder joint. The upper half of the humerus was removed at the first operation, and 20 days afterward the entire remaining portion of the bone including the condyles, the only osseous tissue left being a thin shell of small extent which adhered to the periosteal sheath on the inner surface. The patient recovered rapidly and acquired a surprising amount of use of the affected limb, and the increasing firmness showed that at least partial reproduction of bone was occurring. With the elbow supported, the patient could use her wrist and hand with considerable freedom.

In excising the shoulder joint, or more strictly speaking, the head of the humerus—for the glenoid cavity rarely requires more than superficial scraping or gouging—I have employed the method by a single longitudinal incision. I have endeavored to avoid wounding the tendon of the long head of the biceps, but when the parts are matted together by long-standing inflammation, the tendon is difficult to recognize and is often not seen until it has been severed.

In the after treatment, I attach much importance to the use of the well-known cushion devised by Prof. Stromeyer. It keeps the elbow out from the trunk, thus insuring the close application of the sawn humeral shaft to the glenoid cavity, and enables the patient to sit up or lie down at pleasure, without disturbing the dressings.

The functional utility of the limb after excision of the shoulder joint is upon the whole, quite good. The operation although seldom called for in civil practice, should be adopted without hesitation in suitable cases, such as those of suppurative arthritis, caries and necrosis, in which the indication for the operation is found either in pain, or in exhaustion from profuse purulent discharge. For plastic or rheumatoid arthritis or for simple anchylosis, the operation is not to be recommended, for the mobility of the shoulder compensates measurably for the stiffness of the joint, and the gain which would be obtained by operation is not sufficient to justify the risk.

Elbow Joint. Of the 19 cases of excision of the elbow joint, six have terminated fatally: 2 adults died within five days from traumatic gangrene following injuries so severe that amputation would have been the better operation; one died of delirium tremens; two from tubercular meningitis; and one, an old man, from exhaustion in the course of the fifth week.

In excising the elbow joint, I employ a longitudinal incision on the inner side of the articulation, taking care not to wound the ulnar nerve and to retain the attachment of the biceps. As a rule all the articulating surfaces should be removed, and within reasonable limits, the more bone that is taken away, the better, since flail-like union is less to be dreaded than anchylosis.

For the after treatment, I employ a somewhat obtuse angled, internal splint (Physick's splint) well padded and protected by oiled-silk. As bony union is to be avoided, it is not necessary to use a splint to render the part immovable. As soon as the external wound has become solid, the splint should be abandoned and the arm kept in a sling.

The functional result of a successful excision of the elbow is more nearly perfect than that of excision of any other articulation. Cases which justify this operation, are those of destructive, or gelatinous, arthritis, caries, necrosis, compound dislocation or fracture not so severe as to require amputation, and even simple anchylosis.

Hip Joint. I have 40 times resorted to excision of the hip joint in 37 patients. Twice have I excised, at intervals, both hip joints in the same individual, and once have I had recourse to re-excision in a case in which recurrent caries and recontraction followed some months after the patient left the hospital. This case terminated fatally from suppurative osteo-myelitis and septic peritonitis, at the end of a fortnight. Both cases of double excision did well. Of the 40 operations, 28 were followed by recovery, 11 by death, and one of the patients is still under treatment. Of the 37 patients, 25 recovered and 11 died. Should the patient now under observation die, the rate of mortality will be, as regards operations, 30 per cent.; as regards individual patients, 32.4 per cent.—a much better showing than the results given by most statistical writers.

The incision employed begins with a straight cut in the direction of the fibres of the gluteal muscle, curves around and behind the trochanter, and terminates in a straight cut corresponding to the axis of the femur. While affording free exposure to

the joint, it necessitates but little transverse division of muscular fibres. The head of the bone may be made to protrude, and then removed with the chain saw, or, under other circumstances it may be divided *in situ* with a small saw. It is my custom to remove both trochanters, and to round off the sawn end of the femur. In the *after-treatment*, I keep the limb well adducted with simple weight extension, with lateral support by means of sand bags. As soon as the external wound has become solid, and the patient can control the motions of the limb, he may be allowed to get about on crutches.

The functional result of hip joint excision must be somewhat differently judged from that of excision in the case of other articulations. In most instances the operation is performed only when death seems threatened by profuse suppuration or its consequences, and if the patient is relieved of pain and restored to a fair state of health and comfort, the treatment is amply justified. At the Children's Hospital in Philadelphia, where 20 of the 40 operations were performed, the rule is: not to operate, except in otherwise hopeless cases; and hence our recoveries represent so many lives saved. But in many cases excision not only saves life, but also restores the patient to the active duties of existence. In thirteen of the twenty-eight cases the patient obtained a useful limb, and in two of these the utility is regarded as perfect. The condition which most often calls for this operation is "hip-disease." I consider the operation suitable in certain cases of gun-shot injury. For uncomplicated anchylosis, it is not to be recommended, simple osteotomy being here a safer and surer method. Where anchylosis co-exists with extensive caries or necrosis, excision may properly be resorted to. I am afraid that the "age limit" for hip joint excision must still be maintained; in the case of the knee, I have ventured to extend the benefits of this conservative procedure to adults and even to middle-aged persons, and with great success; but excision of the hip joint becomes an operation of great and rapidly increasing gravity when once puberty is passed. Thus, while I count twenty-five successes and only four deaths in persons under fifteen years of age, I have had only three recoveries and no less than seven deaths in those older. In adults, the operation should only be undertaken with a clear understanding of the very great risks by which, under these circumstances, it is attended.

Knee Joint. I have performed 51 excisions in 50 patients, once having employed re-excision for anchylosis with recurrent deformity, in a case in which I had excised the joint nine years before. Once I amputated the thigh, ten weeks after excision, on account of beginning failure of health, and a good recovery followed. Of the 51 cases, but 5 have ended fatally, a death-rate of less than ten per cent.

In excising the knee joint, I have uniformly adopted the single transverse incision and have invariably removed the patella. The bone sections are commonly made with a Butcher's or bow saw. I take special care to remove all of the diseased synovial membrane as well as all patches of carious bone. In treating the large bursa beneath the quadriceps muscle, I have endeavored to hasten the cure by making a long incision on the outer side of the limb and either dissecting the bursa out bodily, or else scraping away its lining membrane with a sharp curette. If foci of softened and carious bone are found beyond the points at which it is safe to use the saw, I remove them with the gouge, and if necessary cut a channel through the osseous wall in such a way that the part may heal firmly without leaving a sinus.

In the after treatment, I employ a bracketed wire splint which, while firmly fixing both thigh and leg, enables the limb to be dressed as often as is needful without causing the patient pain. I have left the limb on the splint as long as six or seven weeks. After bony union is well advanced and the external wound is almost healed, I substitute a simple posterior splint or gutter of paste board. I think it important to use means of mechanical support for at least six months, especially with children.

The utility of the limb after successful excision of the knee is very great. The limb is stiff and slightly shortened; the foot is sometimes a little inverted, but the limb is strong, painless, and enduring, and enables the patient to lead an active useful life. As a substitute for amputation, and it is as such that I employ it, the merits of knee joint excision can not be gainsaid.

The cases in which excision of the knee joint is indicated are chiefly those of arthritis, especially of the variety for which years ago I suggested the name gelatinous; of caries; of neglected epiphysitis, etc. The operation may properly be performed in anchylosis with deformity, and also in certain instances of wound of the articulation where the extent of the injury

is limited. In most traumatic cases, however, I believe that when any operation is called for, amputation will be found preferable.

Ankle Joint. I have resorted to this operation six times. Although about as often, I have removed the astragalus without interference with the tibia and fibula. Two of the six cases proved fatal from phthisis, one four months and the other nine months after operation. My impression is that this operation in itself is attended with very little risk.

In excising the ankle joint, I make an external incision curving around behind and below the outer malleolus, and carried forward as far as can be done without endangering the extensor tendons, and prolonged upward as far as needful in the line of the fibula. A second smaller incision is made longitudinally over the lower end of the tibia. It is usually desirable to remove the whole astragalus. This is perhaps the most tedious and difficult of all excisions, and the operation may be facilitated by rendering the part bloodless by the use of the Esmarch apparatus. The ankle is the only joint, with the exception of the wrist, in the excision of which the use of this apparatus seems to me to be desirable.

Some years ago I devised a bracketed splint for the after treatment of ankle joint excisions. This answers a good purpose. If antiseptic dressings are used, however, the part usually requires so little disturbance, that a simple posterior gutter of paste board supplemented by a fracture box, will be sufficient. The foot should be kept at right angles with the leg.

The cases which seem to me to call for ankle joint excision are those of compound fracture and dislocation, less severe than to require amputation, and those of localized caries and arthritis in which there is no suspicion of general tuberculous infection.

The large majority of my excisions have been performed without any of the so-called "antiseptic precautions" and the wounds have been dressed with simple oiled lint or with lint saturated with dilute alcohol. For more than a year past, however, I have employed the antiseptic method in almost all my large operations, using also antiseptic dressings in their after treatment and I think with benefit; though I am obliged to say that as regards the ultimate welfare of the patients, I have not noticed any gain. My best series of consecutive successes has been obtained under old methods, and I have not obtained any diminution of mortality by the adoption of the new. At the same time I have seen no ill results which could be attributed to the use of antiseptic measures; their use shortens the period of convalescence; and they have the merit on account of the infrequent change of dressings needed, that they greatly lessen the surgeon's labor. I know of no cases which require more personal and unremitting attention than those of excision, and it is an unquestionable advantage to be obliged to dress a wound only once a week, or every other week, instead of daily or every other day.

What will be the future of the operation of articular excision? The brighter triumph of conservative surgery in the hands of Fergusson and his successors, will it keep its place? or as some of our more enthusiastic brothers prophesy, will improved methods of dealing with joint disease in its early stages, make excision a matter only of surgical history and of antiquarian investigation? It seems to me that as the introduction of excision did not enable surgeons to abandon amputation for articular lesions, so improve treatment as we may, and educate the public as we may as to the necessity of being treated early, there will always remain a class of cases in which only by sacrificing a part, can we hope to save the whole, and in which excisions of the larger joints will therefore still be resorted to by judicious and conservative practitioners.

In opening the discussion, Dr. Lewis A. Sayre, of New York, said: The paper of Dr. Ashhurst has so thoroughly covered the ground, that very little is left to discuss. In excision of the hip joint I have been in the habit of using the wire cuirass, for the reason that it permits the carrying of the patient into the open air—an object not readily attained when the patient is kept in bed with the ordinary apparatus.

In regard to the antiseptic treatment which I practice entirely, I think that I may claim that I have used it without knowing it, from the time that I commenced practice of surgery. I think that my success has been largely due to the practice of pouring into the wound Peruvian balsam, which from the creasote (*sic*) it contains is an excellent antiseptic. I have also always arranged for thorough drainage. When I practiced my first excision in 1854, the operation was universally condemned. Some seem to now be going to the other extreme and performing excision of the hip joint too early, before a thorough trial of local and general treatment has been employed.

Dr. R. A. Kinloch, of Charleston, said: There is now no disagreement as far as the general question of excision is concerned, but there are still some important questions to be considered: In the first place, the distinction of traumatic from pathological cases amenable to operative procedure, and in the next place as regards the joints which are apt to do best in connection with excision for traumatism and for pathological processes. A consideration of the age and surroundings of the patients is of importance. Probably the best results follow excision in connection with shoulder joint excision for traumatism. In connection with gelatinous inflammation of the elbow joint, I have had satisfactory results even where all the material could not be removed.

I feel sure that if a few of the principles of so-called antiseptic treatment, cleanliness, thorough drainage and absolute rest, are adopted, many of the details may be omitted.

Dr. T. F. Prewitt, St. Louis, insisted on the necessity of getting cases of excision in broken down children out of doors as soon as possible.

Dr. F. S. Dennis, New York, called attention to cases of excision of knee-joint for disease beginning in abscess in the condyle. In these cases the abscess cavity breaks down after recovery, leading to the production of deformity. In these case he takes away all of the abscess cavity, saws away a corresponding piece from the tibia and brings the oblique surfaces together.

He has been in the habit of employing antiseptic dressings, removing the drainage tube on the third day, allowing the first dressing to remain five or six weeks.

In excision for injury, only enough bone to allow of free drainage should be removed.

Sir William MacCormac, of London, had heard with some surprise that the tendency seemed to be postpone excision of hip-joint until all other measures had failed. This is not the practice in regard to any other joint. In England the disposition is to perform the operation at an earlier period. Another point that he had not heard mentioned in the paper was in reference to the performance of operation in cases of old dislocation of the joint. He had performed this operation with success in old hip joint dislocation, and reported the case of a sailor coming under observation three years after the occurrence of dislocation of hip joint which had not been reduced. After the operation he could use the limb perfectly. He had been much interested in the recommendation of Dr. Ashhurst that a long incision be made to reach the subcrural bursa, a suggestion which he had not heard mentioned by any other surgeon.

Dr. E. M. Moore, of Rochester, had been somewhat surprised to hear a certain amount of indifference expressed toward the use of antiseptic surgery. He had found in his practice the greatest improvement follow the use of antiseptic dressing in these cases of excision. He cited several cases showing the result obtained.

Dr. John E. Owens, of Chicago, agreed as to the value of the wire cuirass and referred to a modification of this apparatus consisting in the substitution of a frame of gas pipe conforming to the outline of the body. On this the body is supported by means of flannel stretched between the two sides of the frame. Extension may be applied if desired by the use of adhesive plaster, counter-extension being provided for by elevating the foot of the frame. After keeping the patient in bed for 30 days, he tries to get them into the open air. He had found great advantage in keeping up a certain amount of extension after the patient was allowed to get up. By removing pain this enables the patient to move the joint more freely and thus tends to favor greater mobility of the part. He thought that there was no comparison between the antiseptic methods and those formerly employed.

Dr. Fred. Lange, of New York, referred to a class of cases in which the disease of the hip began in the tissue outside of the joint, the articulation becoming involved at a later stage of the affection. In these cases he recommended early operation, with the hope that in this way necessity for opening the joint would be avoided.

AFTERNOON SESSION.

The Association was called to order at 2 P. M. by President Agnew. The first paper was entitled

The Relation of Micro-organisms to Injuries and Surgical Diseases,

by Dr. Nicholas Senn, of Milwaukee. The paper was so extensive that in the limited time alloted to its consideration, the author was able to refer to but a few of the points which it contained. At the present time no argument is required to show that many special conditions are due to the presence of bacteria. In regard to the so-called

hereditary transmission of disease, the author held that the specific microbes of the specific diseases are transmitted directly from parent to child. In evidence of this he referred to cases of so-called hereditary osteomylitis in newly-born infants. In other cases while this same origin may be inferred we have as yet no direct evidence that such is the case. In regard to the question whether or not pathogenic micro-organisms exist in the healthy body, while the results of some observers point in this direction, the results of others are opposed to the existence of pathogenic organisms in the healthy body. The conclusion was that under certain circumstance, pathogenic organisms might be present. There is proof of this in cases in which after accidental injury, there is localization of these pathogenic organisms. Acute suppurative infectious osteomyelitis following slight injury or exposure was cited as an illustration of this fact. This localization is favored by certain anatomical conditions. The antagonism among micro-organisms was being considered when the time of the author expired.

In opening the discussion, Dr. Roswell Park of Buffalo, said he had done some work in this direction. He had examined pus from fifty-two sources and presented a table showing the number of cases in which pyogenic bacteria were found.

He had also prepared culture media with various antiseptics in different proportions, including carbolic acid, iodoform, iodine naphthaline, hydro-naphthol, resorcin, trichlorphenol, creolin, sulpho-carbolate of soda, boric acid, perchloride of iron, antipyrine, antifebrine and quinine. Almost the only one of these antiseptic jellies as thus prepared which has prevented all growths was hydro-naphthol, 1–100. This shows that hydro-naphthol can be relied upon as an antiseptic. Many of the bacteria grow freely on idoform jelly 1–100. Those which grew abundantly on iodoform jelly grow slightly on oxide of zinc jelly 1–100. Oxide of zinc was considered a better solid antiseptic than iodoform. The author thought that our present knowledge permitted us to associate certain bacterial forms with definite pathological lesions. In conclusion he presented the report of a case of abscess of the face in which he found the micrococcus tetragens. So far as he knew this micro-organism had never before been found in phlegmon in man.

Dr. Wm. H. Carmalt, New Haven, remarked that there was only one point to which he wished to refer; that was the alleged microbic origin of tumors. A great deal has been said in regard to the microbic origin of cancers and other tumors. He thought that the division of Virchow's class of granulomas into a class of tumors by themselves known as infectious tumors is correct. This class includes tubercle, syphiloma, lepra, lupus, actinomycosis and myelitis. These growths should be taken out of the class of tumors and assigned to a class by themselves. He had been unable to convince himself that tumors proper have a bacteriological origin.

Dr. N. Senn in concluding the discussion, said that the diseases enumerated in his paper included only those in which the specific cause had been isolated, cultivated outside of the human body, and in which the injection of this culture produced identical lesions. When these three things are done we have furnished positive proof that the disease is due to specific germs. Another class of diseases had been alluded to in the paper in which there was reason to believe from analogy that the affection was due to specific germs, although the three conditions above referred to had not as yet been fulfilled. So far no one had been able to show that the supposed bacillus of syphilis was the specific bacillus. That it is a specific disease cannot be doubted; that it is due to a microbe can not be doubted, but to establish this positively, experimenters must do what Koch did before he announced the specific origin of tuberculosis.

He was firmly convinced from his observations that tumors in the true sense of the word were not due to microbes. He had made tumor implantations for many years in animals and in justifiable cases in man both close to the original seat of disease and at remote points, without obtaining the least evidence of the *microbic origin* of disease.

Dr. W. W. Keen of Philadelphia then read a paper entitled

Three Successful Cases of Cerebral Surgery,

including 1. The removal of a large intracranial fibroma. 2. Exsection of damaged brain tissue. 3. Exsection of the Cerebral Centre for the left hand.

Case I.—Large tumor in the cerebrum probably arising from an injury at the age of three years. Tumor removed at 27. Hernia cerebri; recovery.

The patient, a young man of 27, at 3 years of age fell, striking his head on some bricks. At five he had measles, followed

by discharge from the right ear, impairing hearing. In February, 1885, epilepsy supervened, with intense pain in the head. About April, right-sided hemiplegia was complete, with aphasia. Right pupil was largely dilated and irresponsive to light. Vision imperfect.

When first examined by Dr. Keen, the only remnant of his former condition was epilepsy, hesitation of speech, and headache. In the attacks, the head and neck were turned to the left, while the body was twisted to the left. Convulsions general. Right pupil larger than left. A small scar was decided on as that resulting from the accident. This was half an inch above and in front of the left superior stephanion, 2¼ inches to the left of the middle line, and 3 inches behind the external angular process. The temperature on the left side of head was one degree (C.) higher than on the left. Dynamometer recorded, right 30°, left 35°. Left knee jerk normal, right subnormal. Diagnosis, probable tumor at the base of the frontal convolutions, involving the centres for the leg, arm, face, and speech.

The operation was performed December 15, 1887. An 1½-inch trephine was applied over the seat of the scar. This opening was enlarged to three inches. A tumor was discovered and removed. It weighed three ounces, forty-nine grains. Its size was 2⅞ inches by 2½ inches by 1¾ inches. Hemorrhage was abundant, and checked with difficulty. The wound was dressed antiseptically, drainage being provided for. The wound was followed by hernia cerebri. This showing no tendency to cicatrize, 34 skin grafts were applied. In ten weeks, cicatrization was complete. The elevation was then followed by a concavity. The tumor proved to be a fibroma—a rare form of intracranial tumor.

Case II.—Simple depressed fracture, followed in four months by epilepsy; thirteen months later trephinement and removal of damaged brain-tissue; recovery in seven days; cure of epilepsy to date.

Young man 25 years of age. In November, 1886, he fell 9 feet, receiving a severe blow on the right side of the head. Was unconscious for a considerable time. There was temporary loss of feeling in the three left ulnar fingers. On tapping the head on the right side he produced a "cracked pot" sound. Epilepsy began in March, 1887. Up to April, he had had 5 positive attacks. The diagnosis was traumatic epilepsy from depressed fracture. Centre for left hand and supra-marginal gyrus involved. Operation was done April 12, 1888. As soon as the flap was raised, the bone was found to be splintered. A 1½ inch disc of bone was removed. The dura mater had been ruptured. A small piece of bone had been forced through the dura mater and had become adherent to its under surface. The brain substance had also been ruptured. A cyst, quarter of an inch in diameter, was found connected with the piece of bone. All the brain substance that was altered in character was removed. This piece was ¼ inch long by ¾ inch in width. The button of bone was perforated and attached with chromic cat gut to the flap, so that the bone could not fall in upon the brain substance.

The wound was healed in seven days. After the operation, there was paralysis of the hand as regards flexion. That night flexion was recovered.

Note made May 28, 1888, shows that the disc of bone is adherent, mental and physical condition excellent, flexion of fingers normal. The iris of the right eye, 24 hours after the operation, responded separately as well as its fellow. This isolated symptom of want of proper reaction of the right iris, is probably a new observation, and may be valuable in the future in determining and better localizing the right centre. In this case there have been no epileptic attacks since operation. In the first case there were several attacks during the past summer.

Case III was one involving the removal the centre for the left hand and wrist. The operation was followed by recovery.

The patients were presented.

Wednesday, Sept. 19, Second Day.

MORNING SESSION.

Dr. Hunter McGuire, of Richmond, read a paper entitled

The Formation of an Artificial Urethra for Prostatic Obstruction.

It has been my lot to meet with a number of cases of hypertrophy of the prostate gland, which produce more or less obstruction to the passage of urine. These are conveniently divided into three classes.

1. Cases where the obstruction was due to temporary congestion of an already enlarged gland, which yielded to the ordinary treatment and did not return.

2. A class of cases where the obstruction to the passage of urine was permanent but

not great. Attention to the general health, the occasional introduction of the catheter and washing out the bladder were all that the cases required These cases are, however, never free from danger from exposure, etc., and gradual enlargement may go on and bring about the condition met with in the third class.

3. In these cases the obstruction is great and fixed, micturition is frequent and difficult, perhaps impossible without the aid of the catheter The introduction of the instrument grows more and more difficult; offensive residual urine is always present and the general health suffers greatly. Cystitis, localized or general is a painful and pronounced symptom. Violent tenesmus of the bladder, provoked by the obstruction, injures the vesical ends of the ureters; possibly a reflux of stale urine is driven into these canals and ureteritis follows, then pyelitis and pyelonephrosis, from which the patient dies.

The paper was devoted to a consideration of surgical interference in this third class of cases. He was led to resort to the measures described from the following circumstances: —During the past eight months four cases of stone in the male required the supra-pubic operation. Two because of organic stricture; one because of the large size and hardness of the two calculi the bladder contained; the fourth because the stone was large and hard and the patient two anæmic to bear the shock and loss of blood which often accompanies section through the rectum.

In one of the cases of stricture in a man 65 years of age, the patient had two years before coming under obseration a second cause of obstruction. A well organized stricture was found in membranous portion of urethra. Prostate was enlarged, more marked on the left side. Urine showed no evidence of renal disease. An oxalate calculus ¾ in. in diameter was also recognized. The high operation for stone was performed. The bladder walls were found thick and unyielding, and contracted. The left side of the gland jutted into the bladder one and one half inches further than the right side. The middle lobe was of the size of the thumb and almost completely closed the urethra. It was decided to retain a fistulous opening through which urination could take place. This tract was 2½ in. long and extended upward and forward. In its passive state it was closed by the pressure of the parts through which it passed. When the bladder became full and contracted the urine was forced through the fistulous tract. He can now retain water for two or three hours, and has voluntary power both to retain and expel urine.

Case two was that of a man 69 years of age who had been cut for stone in 1881. In 1883, I found the prostate enlarged and cystitis present. He was given a gum catheter and shown how to use it. In 1886 electrolysis was employed without success in trying to reduce the size of the prostate. July 4, 1888, an operation similar to that performed in the first case was done with equally good results. At times he is able to retain urine for six hours. He never has any desire to empty the bladder no matter how full the organ is.

Mode of operation. The night before the operation the bowels are opened. On the day of operation 15 to 20 grains of quinine are administered. Antiseptic precautions are adopted throughout. The bladder is washed out with a weak solution of carbolic acid in hot water. An empty gum bag capable of holding 12 ounces is passed into the rectum. About twelve ounces of water are then introduced into it. This pushes the bladder above the pubes. The bladder is next filled with a hot solution of carbolic acid. The use of force should be avoided. The penis is tied with a piece of rubber tube to prevent escape of the fluid. A vertical incision is next made, beginning 3 or 4 inches above the pubes and extending to the symphisis. This extends to the linea alba. The incision in the latter structure should be from three-fourths to one inch shorter than that through the skin. When the transversalis fascia is reached, it should be divided, but not for more than two inches, but should reach to the pubic bone. The fat and cellular tissue between the transversalis fascia and bladder is separated with the handle of the knife. This tissue should be disturbed no more than necessary. The bladder is now drawn forward with a tenaculum and opened as low down as possible. The interior of the organ should be carefully explored with the finger.

Sutures should now be applied extending down to, but not including the recti muscles. The opening left in the skin should be at the upper extremity of the wound, so that the fistula will be oblique and from two and one-half to three and one-half inches in length. A catheter is passed through this opening. If the catheter causes annoyance it may be at once removed, otherwise it is better to allow it to remain a few hours. The dressing consists of a pledget of absorbent cotton changed

as often as necessary. In none of my operations have I met with the peritoneum.

In the after treatment it is important to keep the urine acid, for acid urine is aseptic. In operating on these cases and in the high operation for stone, the amount of blood lost has not exceeded two drachms.

Dr. John H. Packard, of Philadelphia, read a paper entitled

Supra Pubic Cystotomy.

The present paper was supplementary to one on the same subject read by Dr. Packard at the last meeting and was intended to correct an accidental omission of the views of Sir Henry Thompson. These were now considered, extensive quotations from the works of this author being given. Two cases were reported in one of which the operation was performed for the removal of a portion of silver catheter broken off in the bladder; and in the other for the removal of a piece of rubber catheter said to have been broken off several months previously. In this case a stone weighing 571 grains was removed, in the interior of which was found the foreign body.

Dr. S. W. Gross, of Philadelphia, in opening the discussion, thought that Dr. McGuire was to be congratulated on having introduced a new operation based upon the mechanism of the bladder and the physiology of micturition: the formation of a artificial urethra in a new position. The various operations which had been performed for the relieve of prostatic obstruction were next referred to, the operations of Harrison, Mercier, Bartinini and McGill were considered.

Dr. Wm. T. Briggs of Nashville, thought that perhaps in the cases reported by Dr. McGuire, a better result might have been obtained by lateral lithotomy, provided the stone were not too large to be removed by that route; for he had noted that after incision into the prostate the gland diminished in size and after the wound had healed a catheter could be passed in cases in which its use was before impossible. The perineal operation allows of freer drainage. Under some circumstances the supra-pubic operation is valuable one. This is especially the case where the stone is so large that its removal through the perineum is liable to produce serious injury of the soft parts. It is however often possible through an incision in the perineum to so break the stone as to permit its removal. Every case should be studied by itself, in some one operation is the best, in others, another is most suitable. All the circumstances of the case must be taken into consideration.

Mr. Reginald Harrison, of Liverpool, said that there are two general methods of relieving obstruction due to enlarged prostate, one by attacking the gland through the bladder and the other through the perineum. In his operation he makes a median or lateral incision through the perineum according to circumstances. The obstructing prostate is next divided with considerable freedom and a drainage tube of considerable size introduced. From this operation, he gets good results. Perineal lithotomy is preferable to the supra-pubic operation because the lateral incision gives sufficient room for all manipulations. It gives an ample opening for the removal of a stone of considerable dimensions. It also permits of the more or less permanent drainage which these cases require. He had also through a perineal opening used the perineal lithotrite with success. All methods of operation should be remembered and each employed in those cases where it seems indicated.

Professor Thomas Annandale of Edinburgh had come to the conclusion that if an operation is to be performed for the relief of prostatic obstruction, the perineal operation is the best. This allows of examination of the bladder, permits drainage and probably causes a diminution of the hypertrophy. It enables you to occasionally remove a portion of the enlarged prostate when this assumes a pedunculated form. The speaker exhibited a rubber tube which he had found useful in cases of Harrison's operation, when a permanent tube is required.

Dr. A. Vander Veer, of Albany, said that the testimony presented in his paper last year was in favor of the perineal opening so far as drainage was concerned. He had employed Harrison's operation in a number of cases and the results had been such as to impress him favorably.

Mr. Arthur Durham, of London, emphatically endorsed what had been said in regard to operation for stone, that no one operation is applicable to all cases. It is a great mistake to be men of one method, especially in surgery. When we hear a man say that he treats all his cases of fracture in such a way, all his cases of stone in such a way and all his cases of prostatic disease in such a way, we may be sure that such a man has a very small practice and experience, or else is a very great fool. In cases in which stone in the bladder is complicated with enlarged prostate, the perineal incision

seems to me to be better than the supra-pubic. He described a method of performing perineal lithotomy which is performed with satisfaction at Guy's Hospital. This consists in the use of a straight staff, the groove extending to within one-third of an inch of its extremity. A knife with a straight back is passed through the perineum until it reaches the groove, then carried along the groove to its extremity and, the point of the knife being held in close contact with the staff, the two are carried forward into the bladder, thus avoiding many of the risks of the operation as ordinarily performed. In concluding, he referred to the great improvement of the Bigelow operation over the old method of crushing for stone. He had no doubt that this method renders both lateral and supra-pubic lithotomy much more rare than they have been in the past.

Prof. Hingston, of Montreal, believed that the supra-pubic operation was one to be performed only in exceptional cases. These he classified as follows. 1. In those cases of stricture in which the obstruction can not be overcome in time to relieve the patient of great suffering. 2. In cases of prostatic obstruction. 3. In cases of tumors of the bladder which would interfere with the lateral operation. 4. In cases where the stone is too hard or too large to be removed either by lithotrity or by lateral lithotomy. He had himself removed without injury to the soft parts, a stone weighing five ounces and five drachms.

Sir Wm. MacCormac, of London, had performed the operation of supra-pubic cystotomy occasionally. He had never seen any untoward consequences and the operation seemed to be devoid of all risk. He did not consider that drainage was necessary after this operation. The bladder empties itself freely and the drainage tube is a source of irritation.

Dr. Hunter McGuire said that the only object of his paper was to describe the two cases in which he had made an artificial urethra to relieve prostatic obstruction. The various operations referred to were not applicable to all cases, while the formation of an artificial urethra could be done in all cases. He was surprised to hear that supra-pubic cystotomy was considered dangerous. It had the advantage of avoiding some of the unpleasant consequences of the lateral operation, such as dribbling of urine and impotence.

Dr. J. H. Packard did not want to be considered as an advocate of supra-pubic cystotomy. It had however been shown that the dangers attributed to this operation, did not exist. He considered that the operation was a valuable resource in certain cases. After this operation he had noted diminution in the size of the enlarged prostate. This he attributed to the rest afforded the bladder. It will take place in whatever way the rest may be obtained.

The President, Dr. D. Hayes Agnew, being called upon, said the ground had been so thoroughly covered that there was little to be added. He agreed with those who held that no single operation was applicable to all cases. The supra-pubic operation may be appropriate in certain cases, while in others the perineal operation is the proper one. In order to avoid the unpleasant consequence which occasionally follow the perineal operation in children where the prostate is small, I avoid the introduction of the finger into the bladder and remove the stone with forceps not much larger than the staff.

While there may be no danger in the supra-pubic operation in skilled hands, yet with the inexperienced operator there will be risk of opening the peritoneal cavity. He thought that a number of cases had been reported of rupture of the bladder following injection of the organ after dilatation of the rectum with the rubber bag.

A paper entitled

Forty Years of Chloroform and Ether in Louisville, Ky.,

by Dr. D. W. Yandell, of Louisville, was read by title.

The following are the officers of the Association for the following year: *President*, Dr. D. W. Cheever, of Boston; *Vice-Presidents*, Dr. T. W. Richardson of New Orleans and Dr. John B. Roberts, of Phila.; *Secretary*, Dr. J. R. Weist, Richmond, Ind.; *Treasurer*, Dr. P. S. Conner of Cincinnati; *Recorder*, Dr. J. Ewing Mears, Phila.; additional members of Council, Dr. W. F. Peck of Davenport and Dr. S. W. Gross of Phila.

The next meeting to be held, beginning the second Tuesday of May 1889, in Washington. Chairman of Committee of Arrangements, Dr. J. S. Billings. Member of Committee of Arrangements, Dr. J. Ford Thompson of Washington.

AFTERNOON SESSION.

Dr. W. T. Bull, New York, read a paper entitled

The Surgical Management of Typhlitis and Perityphlitis.

The author reported seventeen cases oper-

ated on by himself. These he divided into three groups. The first included ten cases in which abscess was opened by incision without opening the general peritoneal cavity, at periods varying from seven days up to six weeks from the beginning of the attack. All of these cases recovered; the second group included six cases in which laparotomy was performed seven times for supposed perforation (one patient being operated on twice). The earliest operation was at the expiration of 36 hours, the latest on the fifth day. Death occurred in two of these cases, one from incomplete operation and the other from imperfect technique; the third group contained but one case, but the author hoped that in the future more would be reported. In this case laparotomy was performed in the presence of threatening symptoms, on the twelfth day, of an attack of perityphilitis. No pus was found and no signs of recent peritonitis. The appendix was surrounded by old adhesions. The diagnosis of this class of affections was then referred to.

The operations described were laparotomy and simple incision of the abscess. Antiseptic precautions should be adopted in both. The incision for laparotomy should begin a finger's-breadth above the right Poupart's ligament and extend upward four inches. The peritoneum should be divided at the lower angle of the wound. Adhesions are then separated and any pus found, evacuated. The intestines should not be allowed to escape through the wound. The region behind the cæcum must be carefully examined. If there is perforation or gangrene of the appendix it should be removed at its junction with the cæcum. After thorough washing out of the cavity a drainage tube should be introduced, passing to the bottom of the iliac fossa.

For opening an abscess, the incision should start from the point before mentioned and continue either parallel with the ligament or more vertical, according to the position of the abscess. Incision may be required above and parallel with the crest of the ilium if the maximum of tumefaction is found there.

A brief report of the cases operated upon was then given, and the following conclusions presented:

Our present knowledge justifies the statement that both the cæcum and appendix may be the starting point of an inflammation spreading to the peritoneum or to the peritoneum and cellular tissue of the illiac fossa, constituting a complicated lesion which for convenience sake we may call "perityphilitis."

This may be, in its clinical course, resolving or suppurative, each marked by definite symptoms in some cases; in others difficult to recognize.

Needle-exploration is a justifiable and desirable method of diagnosis, though attended by some risks. These may be reduced to a minimum if care be taken to reserve the practice for cases where the symptoms have lasted several days, and where a distinct indication "tumor" can be made out.

Suppurative perityphilitis may be a spreading or limited (circumscribed) peritonitis. Both begin with the same set of symptoms, and it is important to discriminate between them in the first 24 or 48 hours or even on the third day.

The presence of any of the local or constitutional signs of general peritonitis justifies the diagnosis of a spreading or generalization, and calls for the performance of laparotomy and the repair of the lesions found.

The absence of these signs or their strict localization warrants delay of a varying length. Any time after a week the abscess may be opened by an incision which must reach the pus, whether it be extra- or intra-peritoneal.

In doubtful cases, the risk of the operation is less than the risk of the disease.

The propriety of exploring and removing the appendix in recurring cases must still remain *sub judice*.

Dr. J. Ewing Mears, of Philadelphia, read a paper entitled

The Propriety of Surgical Interference in Perforating Typhoid Ulcer.

The present state of our knowledge and our largely accumulated experience have enabled us to define, with a degree of exactness, the limits of surgical interference in certain affections of the abdominal organs. The researches of Senn have shown that complete extirpation of the pancreas is invariably followed by death, while partial excision is a feasable operation. We are also able to define the limits of operation in affections of the spleen and kidneys. We may venture to approach the discussion of operative interference in perforating typhoid ulcer with the feeling that here we may be compelled to define a limit to the employment of surgical measures, not without regret at our inability to overcome the

barriers which oppose success, but with a desire to maintain always the good repute of surgical science and art.

A clear distinction must be made between the widely different conditions which precede and follow perforation in typhoid ulcer and in ulcerations of the intestinal canal due to other causes. In typhoid fever, in addition to the intestinal lesions, there is a general degenerative process involving all the important organs. In traumatism, the general condition of the patient may be good. In inflammatory conditions, while the general system may be profoundly impressed, the lesion may be regarded as local in its nature. In diseases of a chronic character, the system has accommodated itself to the impression made by the morbid affection, and the degenerative changes which may occur are not usually general in character.

The symptoms are usually quite distinctive. Death, as a rule, occurs on the second or third day; rarely the fatal result may be postponed two or three weeks, and instances are recorded in which recovery has taken place, adhesions having occurred between the edges of the perforation and adjacent parts.

A careful search of current medical literature reveals but four cases of surgical interference in perforating typhoid ulcer, in all of which a fatal result occurred. The reports of these four cases were given in detail. These cases were operated on by the following surgeons: Prof. Kussmaul, of Strasbourg, Mr. T. H. Bartlett, of Birmingham, Dr. R. B. Bontecou, of Troy, N. Y., and Dr. T. G. Morton, of Philadelphia. In Prof. Kussmaul's case the disease was severe and perforation occurred early when the infectious process was at its greatest height and the vital forces at the lowest point. In Dr. Morton's case the disease was mild, "a walking case." In both of these cases the shock consequent upon the perforation was prompt and profound. In the first case operation was performed within a few hours, but death without reaction from shock occurred in eleven hours. In Dr. Morton's case operation was resorted to twenty hours after the accident. Six hours after operation, the patient sank into a collapsed condition and died. The operations in these cases were performed by surgeons of experience, under strict antiseptic precautions and within a reasonably short time after the accident. We must therefore look for the cause of failure in the systemic condition; the degenerated and devitalized condition of the organs and tissues caused by the infectious process in active progress, utterly deprived of the power to resist the shock of operation; or in the condition of these structures beginning to recover from the effect of the poison in milder form, extremely sensitive to any rude impressions and wanting in tone and power of resistance. It is in the latter conditions alone that the surgeon may hope to achieve success by surgical interference, and then only when such methods are adopted as will reduce to the lowest point the shock of operation.

The following propositions and suggestions were offered: 1. Surgical interference is not justifiable and should not be instituted in cases of typhoid fever in which perforation occurs when the infective process is at its height. 2. In mild cases of the disease in which the pyrexia has not been of high grade, and in which perforation occurs at the end of the third week, or later when the stage of convalescence is fully pronounced, laparotomy may be performed. Surgical interference in cases of this character is advocated with the hope that if the method of operation suggested by Lücke—laparotomy with the creation of an artificial anus—be adhered to, success may be attained. 3. Rapidity of operation will be an essential factor in the achievement of success—through which prolonged exposure of the cavity will be avoided and shock greatly lessened.

Dr. B. A Watson, of Jersey City, in opening the discussion, said that, in cases where perforation has occurred the sooner operation is performed the better. He considered that it is safer to make an exploratory incision than to use the needle. In regard to the paper of Dr. Mears, it covered the ground completely. In those severe cases of typhoid fever where perforation occurs and life is about ebbing away, it would be folly to resort to operation, but in mild cases where perforation occurs the operation should be done early.

Dr. R. B. Bontecou, of Troy, N. Y., had performed the operation in one case of perforation in the third week of typhoid fever; the patient, however, died. He thought that it would succeed in some cases, as in those in which perforation follows imprudence during convalescence.

Dr. O. B. Nancrede, of Philadelphia, thought that the proper place for incision was two inches to the right of the anterior superior iliac spine. He had operated in two cases; in the first there was no pus, but three or four perforations were found. This

patient recovered. The second case was that of a child operated on four days ago. The patient had done well since the operation.

Dr. Gordon, of Portland, referred to the absence of symptoms met with in these cases, and cited a case in which the symptoms were not distinct but in which a pint of pus was found, with general peritonitis and perforation of the appendix. In this case an incision on the right side would not have reached the pus.

Dr. D. W. Cheever, of Boston, reported a case in which strangulation of an old hernia occurred in the third week of typhoid fever, the patient not being seriously ill. A simple incision through the sac was made and the bowel replaced, but the patient did not rally from the shock.

Dr. W. H. Carmalt, of New Haven, referred to a case which had come under his observation with symptoms of internal obstruction. Operation was suggested but refused. The patient died and the autopsy showed perforation of the appendix, extravasation of fæcal matter. The appendix was attached deep down in the pelvis where there was a small collection of pus. This was reached only with the greatest difficulty and after turning the intestines out of the abdominal cavity. This abscess was unaccessible to any of the ordinary methods of operation. The careful exploration of the rectum in this case failed to reveal any sign of disease.

Dr. Joseph Ransohoff, of Cincinnati, thought that the general impression that perityphilitis is necessarily associated with perforation, was an error. There are two classes of cases. In one there is a distinct tumor and in these early operation is by no means indicated. In these cases adhesions have formed and there is a natural tendency to cure. In these cases the abscess finally perforates the abdominal wall or is relieved by incision. The second class is that in which the symptoms of perforation develope suddenly. In these cases the incision should be median.

Dr. T. F. Prewitt, of St. Louis, thought that there must be many cases of inflammation in the region of the cæcum that never suppurate. He recalled a number of these cases, only two of which had died, one from perforation and the other an old man from exhaustion incident to an intestinal affection. In almost all of these cases the patients had had three or four previous attacks.

Dr. Reginald H. Fitz, of Boston, held that the appendix was the seat of disease in the great majority of cases. The symptoms usually enabled the physician to make a correct diagnosis. The use of the exploring needle was not considered advisable. The cæcum can always be readily found by remembering that it is attached to the colon.

Dr. George W. Gay, of Boston, remarked that in the cases on which he had operated, recovery had followed in those cases in which offensive pus had been evacuated, while in those where he had found only serum and flakes of lymph, a fatal resulted followed operation.

Dr. John H. Packard, of Philadelphia, read a paper on

Simultaneous Ligation of the Right Carotid and Subclavian Arteries for Aneurism of the Innominate.

The symptoms of aneurism followed a blow upon the chest. The patient died three days after the operation with symptoms of suffocation. No autopsy could be obtained.

[to be continued.]

Hospital Notes.

Hospital of the University of Pennsylvania.

Reported by Henry W. Cattell, A.M., M.D., Assistant Demonstrator of Chemistry, University of Pennsylvania.

Amputation of Thigh for Giant-celled Sarcoma.

Prof. John Ashhurst, of the University of Pennsylvania, introduced Prof. von Esmarch as his clinic Sept. 22, 1888, as occupying the Chair of Surgery at the University of Kiel, and one of the most distinguished of German Surgeons.

The Professor is a venerable looking man and to him and Silvestri belong the honor of first using what is known as the Esmarch bandage or apparatus for bloodless operations. The professor speaks English with a perfect accent but is at loss now and then for a word. He began by saying:

"While I am relating the history of the patient I always prepare my hands by washing them antiseptically; this saves the time of cleansing them beforehand and then as the hands are washed at the last moment one is sure that they are thoroughly aseptic. The patient that is to be operated on to-day is a woman suffering with a large growth involving the left knee. This growth has

grown within the last eight months and is no doubt a giant-celled sarcoma and will require an amputation of the thigh. I prefer to perform the circular amputation by a single incision. I will now apply the bandage and tourniquet, but will only apply the bandage up to the knee, or otherwise, by the pressure some of the giant cells might be driven into the circulation and the disease be propagated in this manner. I use the elastic bandage which I described many years ago for thigh amputations. The bandage is applied so as to retain as much blood as possible in the body."

The Doctor used a broad bandage of about two inches in width for the tourniquet instead of the narrow tubing generally used in this country. It took twelve seconds for him to make the circular incision, 40 seconds to free the flesh from the bone, and thirteen seconds more to saw the bone—the amputation thus occupying a little over one minute, the seat chosen being the middle third of the thigh. While the vessels were being tied by Drs. Ashhurst and Wharton, the Doctor made a dissection of the tumor and said:

"We find here many cysts and much extravasated blood, both of which are very common in a giant-celled sarcoma. Part of the bone has become the walls of the cysts. The growth probably started in the inferior part of the femur and has completely destroyed the articulation and has also involved the upper part of the tibia. The thigh is broken just above the knee, as we can easily see by the great freedom of motion. We will now dissect the patella and lay it back, as in this manner the arrangement of the growth can most plainly be seen. I have had very many cases of this kind in which I have operated as I have done in this patient, and there has been no return of the disease. In some cases it is possible to amputate with the loss of only a teaspoonful of blood, but in the present case the vessels are all much enlarged and so we have had more bleeding than usual. I generally allow the tourniquet to remain on for five or six hours after the operation; but, of course, ligate the vessels and dress the part at once. Catgut ligatures are used. The periosteum is ligated as well as the sartorius muscle which, unless this be done, is liable to contract. I do not use a drainage tube but allow the angles of the wound to remain open, and at the end of four weeks they will usually be found nearly healed. I use 1 to 10 carbolic acid solution for the instruments except the knife, which is laid in alcohol. For washing the wound I use 1 to 5000 bichloride, as I have found that a 1 to 2000 solution will cause an eczema where the dressing comes in contact with the skin. I dress with sterilized gauze and gauze dipped in the bichloride solution. Wire, or preferably, catgut may be used for sutures. A little compression is used in applying the bandage, and I use a cushion of moss in place of cotton as it is more elastic and cheaper. I do not find it necessary to remove the first dressing for three or four weeks unless there be a rise of temperature, when the dressing is at once removed. Thanking you for your kind attention I will now say good-bye."

Examination of the Heart.

Dr. Pepper at his clinic on September 22, introduced Dr. Sansom, of London, the celebrated specialist on heart diseases, and asked him to show the students how he would make an examination of a patient while making his rounds in the London Hospital.

In making the examination of a patient suffering from heart disease the following method was employed:

A camel's hair brush, some olive oil, a pencil, or still better, a dermatograph, a pleximeter, a binaural and single-stethoscope are required. The pleximeter is **T** shaped, about one and a half inches in height, and made of hard rubber or glass. It is held to the chest with the index and middle fingers of the left hand and tapped with the middle finger of the right. The usual methods of investigation viz., inspection, palpation, percussion and auscultation are employed in the physical examination of the heart. The walls of the heart are outlined with the pleximeter and marked with the dermatograph. Percussion is then made just within the line where dulness is to be expected and just without the line where resonance is to be found. If any mistake has been made it is clearly demonstrated and the line can easily be corrected. The apex beat is located and marked A; other points of interest observed are marked with arbitrary letters. The lines are then moistened with olive oil, the sternal notch, clavicle and ribs being also touched with the oil; and a piece of ordinary copying paper is placed over the chest and gentle pressure is applied. The marks of the dermatograph together with the outline of the sternal notch, clavicle and ribs are thus accurately and completely transferred to the copying paper. The name and date are added and the paper is ready for future reference.

THE
MEDICAL AND SURGICAL
REPORTER.

ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D., EDITOR.

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Write in ink.
Write on one side of paper only.
Write on paper large letter size.
Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate, or omit words like "the," and "a," or "an."
Make communications as short as possible.
NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

PHYSICIANS AS WITNESSES.

From time to time interesting questions arise in regard to the rights and duties of physicians when summoned as witnesses in a court of law, and unfortunately the status of physicians as witnesses is not clearly defined, or it is very imperfectly understood, in the United States. This is the more to be regretted, because it sometimes leads to contentions which are annoying to the courts and prejudicial to the standing of physicians in the community. A case in point has very recently occurred in Wilkes Barre, Pa., where a physician, being summoned by the Coroner to testify in regard to the circumstances attending the death of a woman who died when under his care, refused to present himself at the inquest because his witness-fee was not guaranteed or paid in advance, until an attachment was served upon him, and then declined to answer the question: "What were Mrs. Duningan's symptoms when you were first called to attend her?"

In a letter, which the physician in question was kind enough to write to the Editor of the REPORTER, in response to a request for information, he states that his reason for declining to answer this question was that the "reply required professional skill"; and to the Coroner he stated that he declined to answer as a physician before the witness-fees were paid or guaranteed.

The information which we have in regard to this case leads us to feel a great deal of sympathy with the physician, who seems to have suffered on previous occasions when he gave testimony, trusting that his fees would be paid afterward. We heartily wish that courts and persons exercising the right of summoning witnesses, would provide a proper remuneration for medical men who are called away from their professional duties to act as witnesses, and that the remuneration were always promptly paid. This is a simple question of justice, and all sensible men can agree in regard to it.

In a civil case a witness may, indeed, refuse to attend at the trial, unless his traveling expenses and at least one day's pay for attendance are tendered him. But the rule is different in criminal cases, because the Government has the right to call any citizen to testify, and he must go when called. The Government is both legally and morally bound to pay him finally, but the question of pay is a separate and distinct one, which does not affect the duty of a citizen to obey the summons of a court. These statements, as we have the best authority for saying, apply also to the subpœna of a Coroner.

But the Wilkes-Barre case involves another point. The position of the physician in refusing to testify, in this case, rests upon two assumptions: one, that an answer to a question in regard to the symptoms of his patient would place him in the category of "expert"

witnesses; and, the other that an expert witness has the right to demand payment for services differing from that accorded to ordinary witnesses.

The first assumption, we are sorry to say, we think is wrong; and we have little doubt that a court would decide that the use of the technical word "symptoms," in the question, was simply a convenient way of asking for facts which had been observed by the physician, and which he had no right to withhold, merely because his education fitted him to observe them intelligently and to describe them intelligibly. If this were not the case, we might imagine a mechanical engineer refusing to testify as to the behavior of an engine before it burst, or a civil engineer as to the appearance of a bridge shortly before it gave way. Courts of law have the right to summon the most competent witnesses of any occurrence under investigation; and special fitness to observe and describe these occurrences does not relieve any one from the duty of testifying all his knowledge of them.

The second assumption: that a witness, when asked a question, the correct answering of which requires peculiar knowledge, becomes an "expert witness," and has a right to demand treatment—especially in regard to remuneration—different from that accorded to witnesses in general, is one which we wish was tenable.

In the case of medical men, it ought to be true that, when called upon to testify in regard to matters requiring strictly professional skill, they would receive consideration suited to the position in which they are placed, and remuneration appropriate to the amount of special preparation required for instructing the court. But, as the law now stands, there is no provision for "expert" witnesses, and experts cannot secure any other than ordinary witness-fees, unless they are paid by the parties to any litigation. We may not like it; but this is the fact.

As the matter stands now, a physician who is summoned as a witness has no rights above any other kind of witness. When subpœnaed he must attend, and when questioned he must answer, unless, on appeal to the court, he is excused from answering. This fact should be known to all medical men, so that they may not assume a position which is sometimes annoying and irritating to the officers of justice, and which may prove embarrassing or dangerous to themselves.

Our sympathy is naturally with our professional brethren in regard to their position when called as witnesses. We know how trying this position often is. But we are fully convinced that no good can come of following our feelings against the law and the settled custom of the courts. The only way in which the position of medical witnesses in the United States can be improved is by appealing to the legislatures to define this position in a way more consistent with our ideas of what is right. Men who take the stand taken by the Wilkes-Barre physician may, by making martyrs of themselves, as some men have done, and as he seems willing to do, draw attention to the subject in a way which will result in changing the present treatment of medical witnesses; but at present it must be admitted, if we would not deceive ourselves, that the law does not recognize any class of witnesses that can make terms with a court, or refuse to attend or decline to testify when summoned in the ordinary way.

DR. WILLARD H. MORSE.

In the *Druggists Circular* for September, 1888, there was a long and circumstantial account of the arrest of Dr. Willard H. Morse, of Westfield, N. J., on the charge of using the U. S. mails for a fraudulent purpose. The article described how a trap was set to catch Dr. Morse, by getting him to make a false certificate of a chemical analysis of a certain commercial article, and how he seemed to fall in it. His arrest was accom-

plished throught the instrumentality of the well known Mr. Anthony Comstock. As it was first reported,—and the story was extensively published in the daily papers—the case seemed to be hard against Dr. Morse. As the latter has been a contributor to the columns of the REPORTER, an article of his appearing as late as September 1, 1888, we felt a natural interest in his case, and were glad to receive from him a letter, in which he assured us that the charge against him was false and that on Monday, Sept. 10, he was honorably acquitted, before U. S. Commissioner Keasbey, of Newark, and that the latter, and Mr. Comstock, and the Editors of the Druggists Circular were satisfied that he was innocent.

On receiving this letter, we wrote to the editors of the Druggists Circular, to ask if they were correctly reported. In reply, they wrote that the claim made to us by Dr. Morse was "false from beginning to end." This plain statement has been followed up by the publication in the *Druggists Circular* for October of a full account of the proceedings against Dr. Morse, and their issue. The result, according to this account, was very far from an honorable acquittal, and we regret to say that it leaves us under the impression that Dr. Morse fell into a trap which would not have caught an honest man.

We refer to this matter partly because our readers have a right to know when one who has been allowed to use the columns of the REPORTER seems unworthy of confidence, and partly because Dr. Morse has had the assurance to ask us to vindicate him to the readers of this journal. We think we deal fairly with him and our readers when we say that he now occupies a position which has every appearance of being that of an unscrupulous and dishonest man. If this is the result of misfortune, we are very sorry for him; if it is the result of deliberate wrong doing, we trust his present shame may direct him into more honorable paths in the future.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION AND THE CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

It is with some regret that we note the fact that the number of the *Journal of the American Medical Association* for September 22 contains a letter from an anonymous correspondent in London who speaks in terms of severe disparagement of the recent Congress of American Physicians and Surgeons, which has been so great a success and so creditable to the profession of this country. The Editor of the *Journal* might have spared his countrymen the bitterness and malevolence of this unjustifiable affront, and his error in laying it before the readers of the *Journal* is the more unfortunate in view of the paragraph which immediately followed it.

The *Journal of the American Medical Association* was not intended to be the organ of any man, or of any party, and the best friends of the Association cannot be pleased when it is used to pay off old grudges or to gratify personal vanity.

It is a pity that such an unpleasant thing should have to be said; but the occasion seems to call for it. The part of the letter to which we have referred is published in another place in this number of the REPORTER, and our readers may judge for themselves whether or not our strictures upon it are justifiable. We have little doubt, however, that the charges of dishonorable conduct made by this anonymous correspondent will be repelled with equal indignation on both sides of the Atlantic, and that it will be fortunate for his reputation if he succeeds in concealing his personality.

THE QUARTERLY COMPENDIUM OF MEDICAL SCIENCE.

We desire to call the attention of the readers of the REPORTER to the quarterly magazine published at this office. It is not a duplicate of the REPORTER, but an inde-

pendent publication, which contains select papers taken from other medical journals—chiefly of Europe—and translations, classified according to subjects, and carefully edited. It makes a summary of the progress of medicine for each year, and includes papers which are rather too long for quoting in the REPORTER, or for which we have no room in this journal.

It is impossible, in the REPORTER alone, to give our readers all the medical news we would like to, and the best we can do is to offer them, at a very low price, this supplement, which consists of four numbers a year, each containing about 150 large octavo pages handsomely printed and covered, and which is worth more than many books of the same size which are sold at a higher price.

We are just now sending out specimens to those of our subscribers who do not take the COMPENDIUM. In doing this we are sending as many as we can of the latest issues; but last year's issue is worth the price and whoever gets a copy of it may be sure that this year's is, and next year's will be, every way better. We hope to hear from many of our readers, and to have a large addition to the subscription list of the Quarterly Compendium.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

THE MEDICAL AND SURGICAL HISTORY OF THE WAR OF THE REBELLION. Part Third; Medical Volume.

With this volume the United States Government brings to an end the unparalleled series of books, published under its authority, describing the medical and surgical experiences of the army of the United States during the civil war. Those who are familiar with the volumes which have preceded this one will understand that it is praised sufficiently when we say that it is a worthy successor to them. Its text is most judiciously arranged, and its illustrations are simply superb. It is a monument of the munificence of the Government, and of the skill and devotion of the Surgeons of the Army.

The labor involved in preparing and issuing such a work as this can never be fully appreciated by those who have not been engaged in it; but all can admire the result, and pay their tribute of respect to the industry and genius which have combined to produce a work which sheds so much lustre upon the medical department of the United States Army.

A CLINICAL ATLAS OF VENEREAL AND SKIN DISEASES. By ROBERT W. TAYLOR, A.M., M.D., Surgeon to Charity Hospital, New York, etc. Parts I and II. Philadelphia: Lea Brothers & Co., 1888. Price $2.50, each part.

This magnificent work which is to be completed in eight parts contains a large number of handsome colored plates representing a variety of conditions of the genitalia caused by venereal disease. Fortunately for mankind such appearances as are here shown are rarely seen outside of hospitals devoted to the care of the outcast or impoverished classes. Still, every student of venereal diseases ought to be familiar with them, and to those who have had the benefit of hospital experience or observation which included such sights as this work represents, its plates will serve as a powerful reminder of what they have seen before, while those who have had no such observation will find here uncommonly graphic and faithful representations of them.

In a work of this sort the text must be, to a certain extent, subordinated to the pictures. Its methods are more like those of the clinic than those of the lecture-room. But it is none the less instructive for this fact, and on this very account it is more interesting than a formal treatise could be. The reputation of the author as a syphilographer assures the reader that he may trust the scientific statements it contains, and the artistic excellence of the plates speaks for itself.

THERAPEUTICS: ITS PRINCIPLES AND PRACTICE. By H. C. WOOD, M.D., LL.D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania. Seventh edition. 8vo, pp. 908. Philadelphia: J. B. Lippincott Co., 1888. Price: cloth, $6 00; sheep, $6 50.

When Dr. Wood first issued his work on Therapeutics it immediately took a very high rank in the estimation of the profession, and this rank has been maintained as it has passed through its various editions, until now there is little need for praising what is already so well known. No work in the English language contains so complete an account of the physiological action of drugs, and none contains a more intelligent account of the way in which drugs should be used.

This last edition has all the merits of its predecessors, and more. It has been thoroughly revised so that it includes the most recent additions to the list of medicaments, and it has been rearranged so as to make its information more easily accessible to active practitioners. We can heartily recommend it to the notice of our readers, and congratulate the author upon its contents, and the publishers upon the way in which it is issued from the press.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM. By AMBROSE L. RANNEY, A.M., M.D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-Graduate Medical School and Hospital, etc. Second edition. 8vo, pp. xxxv, 791. New York: D. Appleton & Co., 1888. Price $5.00.

Dr. Ranney's book gives a very complete description of the different parts of the brain, spinal cord

and nerves, both in regard to their anatomy and physiology and in regard to their various pathological conditions. The portion of his work devoted to cerebral localization, and to the course of the different nerve tracts in the cord and brain, are especially full and instructive. A work of this kind is a necessary part of the library of every neurologist, and would be a valuable addition to any library. Nowadays the work of the surgeon is so often applied to the treatment of diseases of the nerves and spinal cord and brain that surgeons need to know a great deal which was once considered to be entirely within the province of the neurologists. To such surgeons as appreciate this need we can heartily recommend Dr. Ranney's book, the text of which is clear and intelligible, and the illustrations of which are admirable.

Finally, it may be stated that the book is very handsomely printed and well bound, and that it reflects as great credit upon the publishers as upon the author.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

Memoir of A. F. Erich. By George H. Rohé, M.D., Baltimore, Md. 15 pages. 1888.

On the Treatment of Acute Rheumatism with Special Reference to the Use of the Salicylates. By Donald W. C. Hood, M.D., London, England. 66 pages.

—Dr. Rohé, at the request of the Faculty of the College of Physicians and Surgeons of Baltimore, prepared this Memorial Address on the life and labors of his fellow-professor Dr. A. F. Erich. Its style is admirable, and it presents a sketch of Dr. Erich's life worthy of the careful attention of all who admire what is excellent. As the tribute of a friend it is full of warmth, and as a study of character it is marked by great discrimination and judgment.

—Dr. Hood's pamphlet, to which we have already called attention in an editorial in the Reporter, May 26, 1888, contains a most elaborate and interesting study of the treatment of acute rheumatism, and especially of the effects of the salicylate of soda. He is a strong advocate of the use of this drug in acute rheumatism; but he is a discreet and temperate advocate, who discriminates between the different conditions which different cases may present. It would be of advantage to all thoughtful medical men to learn what Dr. Hood has to say on the subject he here discusses; for there is much in his paper beside the mere study on therapeutics indicated by its title.

—Dr. William Osler, Professor of Clinical Medicine in the University of Pennsylvania, has been appointed Physician to the Johns Hopkins Hospital, and Professor of Medicine in the Johns Hopkins University, Baltimore. Dr. Osler took his degree in McGill University, Montreal. He subsequently studied in London, Berlin and Vienna, and in 1885 was appointed Gulstonian Lecturer for that year before the Royal College of Physicians, London; and in 1886 he delivered the Cartwright Lectures in New York.

Correspondence.

The Toxicity of Fruit Juices.

To the Editor.

Sir: In these days when we are told that poisonous germs are concealed in every gutter when we are abroad; when in a room in our own homes the air may be freighted from a badly constructed system of drainage or by overcrowded rooms; and when, even in the country, we may be drinking impure water from a sparkling spring—I say, when we have these and many other just causes for true alarm, it is little less than a sin to trifle with people's credulity or resort to unfair means to advertise one's self by misrepresentation. No class of people is more open to criticism than is the apothecary. He is attacked on one side by those who say he adulterates; on the other by those who think he charges them exorbitant prices. The latest specimen of the former class is the "Toxicity of Fruit Juices" crank, who insists that nearly all the syrups the thousands of people in this country are daily consuming are artificial, and that those who use them are not only wilfully cheated, but also given poisons which are calculated to impair their very vitality by slow degrees. This charge is a base slander; and one must be a fool to think the majority of people would believe it. The better class of drug stores all over the country use natural fruit juices: just as the better confectioners flavor their goods with natural fruit juices or extracts made from them. Almost any one can distinguish an artificial fruit juice from a natural one, and I venture to say there is not one drug store in fifty—taken promiscuously—that would sell artificial syrups. While an apprentice in the drug business, and within a few years after, I was in seven different stores, two of these at the seashore, and during that time I have handled hundreds of gallons of fruit juices, and I have never sold a single artificial fruit syrup nor heard of a respectable druggist who has done so.

A great many apothecaries express their own juices, while the majority buy them of reputable manufacturers, who make them on a large scale more cheaply than they can be made in a small way. So great has this industry become within the last few years that these manufacturers contract a long time ahead to take a fruit-grower's whole crop; and any one who will take the trouble to look the matter up can easily be convinced of the great amount of fruit used for this purpose.

Why any man should make such false charges as were made in an article on the Toxicity of Fruit Juices, in the REPORTER, Sept. 1, p. 267, 1888, is beyond my power to understand. If he has erred from ignorance, I hope you will use this means to correct his false statement; if he has deliberately stated what he knew to be untrue in order to advertise a very "shaky" means of existing—that of pretending to be an analyst, when he has no right to the name—it is high time that his pretensions were exposed, and he himself shown in his true light, whatever it may be.

Yours truly,

Philadelphia, September 29, 1888. CORNELIUS W. STRYKER.

NOTES AND COMMENTS.

Carping Criticism.

The *Journal of the American Medical Association*, Sept. 22, contains an unsigned letter from an "occasional correspondent" in London, which concludes as follows:—"The meeting this month, in Washington, of the Congress of American Physicians and Surgeons, has made little or no impression upon the mass of medical men throughout Europe. Now and then I have heard reference made to the meeting in a kindly manner in this and other medical centres. A very large number of eminent members of the profession in all parts of Europe have been invited, and even urged, to attend, and but few, very few, will be at the meeting, even though, I am told, *suggestions have been made to many that possibly American degrees may be conferred upon many who will honor them by their presence.* [Italics ours.] Unfortunately for the present managers of the Congress, the part they have taken during the past year against their own countrymen has now become more apparent here, and the reaction has been anything but favorable to them and their meeting. The suggestion, or even the promise, of degrees to be given out, which is whispered around here, may induce a few to attend the meeting, but the very many invited will stay at home.

"I cannot close this brief letter without making reference to the second visit to the late meeting of the British Medical Association, of the Father of the American Medical Association. Dr. Davis was received not only warmly, but enthusiastically, and all honor was shown the late President of the Ninth International Medical Congress."

Irish Lunatic Asylums.

From the thirty-seventh annual report recently issued, it appears that at the close of last year the insane in Ireland had increased by 561 as compared with the preceding year. This increase occurred among the lunatics in public asylums, poorhouses, and in private institutions, and is considerably more than in any previous like period. The admissions into district asylums for the year numbered 2863, which, with those previously admitted, make a total of 12,940 under treatment, of whom no less than 620 were relapsed cases, some for a fourth and fifth time, and not a few at regular intervals—facts indicative of the recurrence of mental disease. Of these 12,940 inmates, 1582 were discharged; of whom 1123 had recovered, 375 were relieved, and in 84 instances no improvement had taken place. The mortality amounted to 857, or a death-rate of not quite 7 per cent. on the total treated.

With respect to the curative and beneficial results of treatment during last year, the former, if compared with admissions alone, would show a return of nearly 40 per cent.; but on the average under treatment, the cures would stand at about 11 per cent., and the improved at nearly 4 per cent. As regards the relative proportion of the probably curable to the incurable, they stand in the ratio of 1880 of the former to 8619 of the latter, in which are included, to the number of 827, epileptics, lunatics, and idiots. The average capitation cost on the daily average of inmates amounted to about one hundred dollars.—*Lancet*, August 18, 1888.

Antimony in Acute Rheumatism.

For acute rheumatism, so long as it affects the joints only, Professor Jaccoud (*Journal de Médecine de Paris*, May 6, 1888) is quite satisfied with the treatment with salicylate of sodium. But when the pain has gone, and nevertheless maintenance of the high temperature or the development of hyperpyrexia shows some complication at work, he thinks the use of the salicylate of no avail or even harmful, and resorts to a treatment by a depressant, viz., tartar emetic, pushed to an amount which produces vomiting. In cases which occupy an intermediate position—in which under the salicylate treatment the pain ceases, but the temperature is only slightly reduced—he employs hydrobromate of quinine in doses of about four grains every six hours. —*Practitioner*, July, 1888.

Honors for Women Doctors.

The French Government has just distinguished itself by conferring the officership of the Academy on Madame Gaches-Sarrante, the doctor to the Grand Opera of Paris, for "exceptional services." What the exceptional services consisted in we are not told, but the woman's career is one worth noting as an instance of what indomitable perseverance, assisted by sterling qualities, can effect in the long run. Married at sixteen, and a widow at eighteen years of age, she experienced the necessity of providing for the requirements of every-day existence. An accomplished musician, and gifted with a voice of excellent quality, she played in operettas for some time until an affection of the larynx cut her theatrical career short. During a visit to Montpellier, yielding probably to the influence of environment in a town where two out of every twenty people are doctors, she studied for and obtained the diploma of midwife. A year or two later her taste for this new occupation stimulated her into working for the diploma of *officier de santé*, and later on, undeterred by the six years' curriculum and the preliminary degrees in arts and sciences, she resolutely carried the doctorate by assault. Then she came to Paris, and one fine morning was appointed *médecin de l'opéra*, a much envied, if not very remunerative position. Our neighbors have evidently surmounted those prejudices which still limit the ambition of women practitioners in this country.—*Medical Press and Circular*, August 15, 1888.

New Preserving Fluid.

At the meeting of the New York Pathological Society, June 13, 1888, Dr. T. M. Prudden presented the formula for a new preserving fluid, which had been referred to by Dr. Northrup.

Water	35 fl. oz.
Common salt	3 oz.
Saltpetre	6½ drachms
Carbolic acid	1¼ fl. "
Glycerine	4 fl. "
Amylic alcohol	1¾ fl. oz.
(or Ethylic alcohol	3½ fl. oz.

Specimens should be first soaked in a strong brine and then placed in a large quantity of this fluid. He believed the mixture would be found to serve a useful purpose in the temporary preservation of gross pathological specimens without changing their color or otherwise altering their general appearance. The mucous membranes were particularly well preserved in the fluid.—*Medical Record*, August 4, 1888.

NEWS.

—The number of cases of yellow fever at Jacksonville is decreasing.

—The Medical Society of Virginia will meet in Norfolk, October 23.

—The number of registered physicians in New York City is said to be 2350.

—Sir William MacCormac did a suprapubic lithotomy at the University Hospital, Sept. 26.

—The first Congress of Italian physicians will be held in Rome from October 15 to 18, 1888.

—The 75th annual meeting of the Vermont State Medical Society was held at Montpelier, October 11 and 12.

—Professor Bardenhauer, of Jena, is to be offered the Professorship of Physiology in the University of Greifswald, made vacant by Professor Budge's death.

—Dr. H. Frémy has been instructed by the French Government to visit the United States to study the methods of treatment of tuberculosis in hospital and in private practice.

—The corner-stone of a hospital, to be an annex to the present city hospital in Baltimore, under the control of the Sisters of Mercy, was laid September 30 by Cardinal Gibbons.

—Dr. Louis Bauer, of St. Louis, is said by the *International Medical and Surgical Synopsis*, September, 1888, to be convalescing from a remarkable combination of disorders, apparently the result of wound-infection.

—Succinamidé of mercury is the latest claimant for favor in the hypodermic administration of mercury. It occurs in the form of a white, silky powder, very soluble in water. The watery solution is said to remain clear a long time, and to possess the additional advantage of not precipitating albumin held in solution in liquids; it gives no precipitate with serum from the pleura, and none with hydrocele fluid.

—The *Lancet*, Sept. 29, 1888, says that the Minister of Education has made the following appointments in the University of Vienna, ignoring the selections of the professorial Senate, which he considers were dictated by motives of personal liking rather than of public utility: Professor Emil Zuckerkandl, of Graz, to the chair of Anatomy; Professor V. Ritter von Ebner, of Graz, to the chair of Histology; and Professor

Theodor Puschmann, of Vienna, to the chair of the History of Medicine.

—On September 25, a Memphis physician was summoned to a patient who had just returned from Decatur, where yellow fever existed. He had many of the symptoms of that disease. It was subsequently determined, however, that the patient with the suspicious symptoms was intoxicated, and that the symptoms were due to an accompanying "bilious" attack. In the meantime the populace had become frantic with fear; and when they learned that there was no cause for alarm, they gave vent to many expressions by no means complimentary to the attending physician. These the *Memphis Medical Monthly*, October, 1888, publishes under some introductory remarks upon "man's inhumanity to man."

HUMOR.

CITIZEN. "Hello, Doc., have you seen Mike?" Doctor. "What Mike?" Citizen. "Microbe. He's looking for you." —*Memphis Medical Monthly.*

COMPARATIVE APPETITES.—Very stout old lady (watching the lions fed): "'Pears to me, Mister, that ain't a very big piece o' meat fer seech an animal." Attendant (with the greatest and most stupendous show of politeness on earth): "I s'pose it does seem like a small piece of meat to you, ma'am, but it's enough for the lion."—*Life.*

OVERTAXING HIS BRAIN.—Old Mrs. Bently—"Did you hear, Josiah, that the young student who has been boardin' at the Hendrickses is very sick?" Old Mr. Bently—"Yes, I heerd so; what's the trouble with him?" Old Mrs. Bently—"Studyin' too hard, I s'pose. The doctor says he's got information of the brain." —*The Epoch.*

PREPARED FOR THE ORDEAL.—Boggs: "Hello, Jagley! What on earth are you doing with that box under your arm?" Jagley: "Sh! It's a phonograph. I'm going to call on a young lady from Boston this evening, and this thing, with the help of a dictionary, will enable me to study out what she says at my leisure, after I get home."—*Judge.*

THAT ALTERED THE CASE.—Dr. Pillsbury (to patient): "My dear sir, all you need is plenty of outdoor exercise. Now, here is a little work that I would strongly advise you to read. It will teach you how to gain and preserve health. Its title is 'Physical Culture for the Million,' and—" Patient: "But, doctor—" Dr. Pillsbury: "Well?" Patient: "I wrote that book."—*Time.*

A DISCONSOLATE WIFE.—"I don't believe in these secret societies," said one Austin lady to another. "That's very singular," replied the other; "your husband is a Forester, a Knight of Pythias and a Knight of Honor, and you will have at least $10,000 when he dies." "But what good does all that do me," was the tearful response, "when he never dies?" and the poor creature burst into tears.—*Texas Siftings.*

SCIENCE AND FLEAS.—In answer to a correspondent who desired to know how to drive fleas out of a room, the Philadelphia *Press* says: Science has recently discovered that the muscles, or springs in a flea's legs, enable it to jump a distance equal to 200 times its length. If, therefore, you will place the fleas in a straight line, at a distance equal to 200 times their length, from an open door, and can train them to make the jump all together in the right direction, you may perhaps be able to secure their absence. Failing in this, consult a druggist.

OBITUARY.

CLARENCE G. HOLLISTER, M.D.

Dr. Clarence G. Hollister, who has on several occasions made valuable contributions to the columns of the MEDICAL AND SURGICAL REPORTER, died September 27, 1888, at his residence in Meadville, Pa., after a five weeks' illness with pneumonia.

Dr. Hollister was born at Garrettsville, O., about thirty-four years ago. He was educated at Wooster Medical University at Cleveland, and after graduating from that institution practiced his profession for a time at Sharpsville, Mercer County, Pa. He afterward removed to Cambridgeboro, and settled down to hard work in that place. He was young and energetic, and his capacity for work seemed to have no limit. Unfortunately his strength was overestimated, and his health was undermined by the severe and constant strain. In December, 1882, Dr. Hollister married Frances, widow of the late W. R. Gill.

About one year ago Dr. Hollister located in Meadville, and he was fast building up a lucrative practice when he was stricken with the fatal illness and was compelled to relinquish all work. He was a pure and upright man in every sense of the term, and all who had the pleasure of his acquaintance will regret to learn that he is no more.

THE

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COMMUNICATIONS.

RECORD OF ONE TERM OF SERVICE IN THE SURGICAL WARDS OF THE GERMAN HOSPITAL OF PHILADELPHIA.

BY J. WILLIAM WHITE, M.D.,
ONE OF THE SURGEONS TO THE HOSPITAL.

I desire to place on record, in as brief and concise a manner as possible, the most important of a series of cases treated by me during a term of service at the German Hospital, extending from the first of February to the middle of May, 1888. I do this because many of the cases are in themselves interesting and instructive, but especially with the wish of bringing before the profession through the columns of this journal the varied and extensive character of the surgical service in this hospital. I shall classify the cases rudely and confine myself to the most salient points, avoiding detail.

MODIFIED PIROGOFF AMPUTATION. P. D., 11 years old, while riding on the platform of a passenger train was thrown off, and fell with his left foot under the wheels, sustaining a severe crushing injury of all the anterior portion of the foot, which necessitated amputation. As the tissues of the heel had escaped injury, I performed a Pirogoff operation omitting, however, the section of the lower end of the tibia and fibula, and placing the sawn surface of the os calcis in contact with the articular surface of the tibia, the former bone fitting closely between the external and internal malleoli. Cat-gut drainage was used through the posterior angles of the wound, and a small rubber drainage tube laid across its anterior portion. On the evening of the third day the temperature reached 101.5°. The stump was dressed and found in good condition. There had been but moderate oozing, and no retention of discharge. Next morning the temperature was normal, and so remained. Two weeks later the stump was again dressed, the drainage tube removed and the dressing reapplied. At this time there was slight motion of the os calcis upon the tibia, but the position was perfect. The stump was carefully dressed and, the sutures having been removed, it was allowed to remain without further inspection for three weeks, consolidation in such cases taking place more slowly than when two sawn surfaces are applied to each other. On removing the dressing at the end of this time the bones were found perfectly united, but the os calcis had a slight angle with the bones of the leg. Measurements on each side from the anterior superior spinous process to the lower surface of the heel were precisely the same, and the little patient could walk without pain and almost without a limp. The union was so firm and the practical results so good that I made no attempt to straighten the angle which I have mentioned.

This case illustrates the excellent results which can be obtained by the modified Pirogoff operation when it is possible to insert the piece of calcaneum in the lower flap between the malleoli, the latter giving admirable support and preventing displacement either inward or outward. The opening of a second extensive surface of cancellated tissue—at the lower end of the tibia—is thus avoided, and this is worthy of consideration, though not of so much impor-

tance now as in the days when antiseptics were unheard of. The case also illustrates, however, one of the minor disadvantages of infrequent dressings. The slight motion which existed, at the time of the second dressing, permitted subsequent displacement; this remained unnoticed during the long period that elapsed before the next dressing, as it was not sufficiently marked to be observed through the bandages. The use of a splint would have made displacement impossible, and I shall either change the dressings oftener in my next case or employ a felt splint moulded to the posterior surface of the stump and ankle.

Resection of Ankle. R. D., 25 years old, while working in the Pencoyd Iron Works, sustained a compound luxation of the ankle joint, produced by a heavy bar of iron falling upon his foot. The internal malleolus was fractured on a level with the articulating surface of the tibia; the fibula was fractured two inches from the lower extremity; the soft parts were widely torn, and several inches of the tibia protruded from the wound. The vessels, with the exception of the dorsalis pedis, were intact, and the anterior portion of the foot in good condition. I enlarged the opening through which the tibia protruded and removed the internal malleolus, together with the lower extremity of the tibia. The lower fragment of the fibula was removed through a curved incision parallel with the posterior border of the external malleolus. I then with a Hey's saw removed the upper surface of the astragalus, brought it up firmly against the lower end of the tibia, placed two small rubber drainage tubes in position, one behind and one in front of the line of the union of the bones, brought the external wound together with silver sutures and put the whole foot and leg in a plaster-of-Paris dressing, leaving fenestra for the discharges to escape. In five weeks union was perfect with the exception of a small patch of granulations from the inner angle of the wound. The highest temperature was reached on the evening of the seventh day, when it touched 101°. At this time the first dressing took place; subsequently the temperature continued to be absolutely normal.

In cases of which this is an illustration, the plaster-of-Paris splint is most admirable for the absolute fixation and immobility which it affords. When, however, on account of the soaking of the discharge it becomes necessary to remove the splint, it is very difficult to do so without considerable disturbance of the part. This, after excisions, is very objectionable, and I shall feel disposed at my next operation of the character just described to depend either upon the silicate dressing, which is more easily cut, or upon felt splints moulded to the limb.

Amputation at the Lower Third of the Leg. This was done in two cases, both of crushing injury received upon the railroad, one in a boy 10 years old, the other in a woman 60 years old. Both patients recovered without elevation of temperature, the highest in either case being 100.8°, and that on only one occasion.

Amputation of First, Second, and Third Metacarpal Bones and their Corresponding Fingers. This case was one of crushing injury of the hand from compression under the shaft of an engine. With a little difficulty, enough of the soft parts were preserved to make flaps for the thumb and little finger, leaving a "lobster hand" which, however, proved to be very useful. There were only three dressings; no elevation of temperature.

Amputation at the Wrist Joint. In this case the entire hand was crushed between the bumpers of cars. The amputation was done at the wrist-joint, the styloid processes of the ulna and radius being retained. Union took place by first intention with only four dressings; there was no elevation of temperature. The stump was a useful and symmetrical one, and the amount of pronation and supination retained somewhat remarkable. Unless the styloid processes interfere with the application of an artificial hand (and I see no reason why they should), it would seem useless to remove them in this amputation, although the usual advice is to do so.

Amputation of the Arm. In a case of railroad injury crushing the fore-arm, elbow, and lower arm, I amputated at the upper third by the musculo-cutaneous flap method. The soft parts were brought together in layers, the biceps and the brachialis anticus being first stitched to the triceps and then the skin brought together over the muscles by a separate row of sutures. I preserved some doubtful tissue in my desire to avoid going to the shoulder joint in this case, and as the result there was slight sloughing of the skin flaps, the temperature rising on one occasion to 103°. With that exception there was no complication, and the patient recovered promptly with a symmetrical and useful stump.

Abdominal Section. *Case I.* — Miss E. L., 38 years old, with a family history of tuberculosis, was well until she was 20 years of age when she met with an accident producing a severe contusion of the left ovarian region. This was followed by great tenderness, which persisted for a long period. Menstruation became very scanty, irregular, and exceedingly painful. Two years ago, after an acute exacerbation of the ovarian symptoms, there was a sudden and copious discharge of pus from the vagina, followed by temporary relief. Since then she has had symptoms of pelvic cellulitis, accompanied with pain in the right ovarian region, tenderness, and frequent discharge of pus. Oöphorectomy was performed May 8, and five weeks later she expressed herself as freer from pain than she had been for years. Recovery was rapid and interrupted only by the formation of a small stitch-abscess requiring evacuation. This kept the temperature for a few days in the neighborhood of 100°; during the rest of the time it was normal.

Case II.—Mrs. E. B., 34 years old, presented herself with a large abdominal swelling, which had begun about one year before. It first appeared on the left side, afterward extending to the right; the pain in the early stages was extremely severe but decreased as the tumor enlarged. The diagnosis of pregnancy was persisted in by a local physician up to the time of her admission to the hospital. I performed abdominal section on April 10, removing a multilocular cyst of the left ovary, which weighed, with its contents, about twenty pounds. As there was a small fibroid growth of the uterus, and as she had not yet reached her menopause, I removed the uterine appendages on the right side also. The second day after the operation her temperature reached 100.5°; with that exception it remained normal. There was but one dressing; she was kept in bed for three weeks as a matter of precaution, and was discharged as cured.

Case III.—Mrs. S., 45 years old. She had a family history of cancer and tubercule. She had married when 16 years old, had nine children—twins once and triplets once, and had had four abortions. There was a laceration both of the cervix uteri and of the perineum. The patient had suffered much from dysmenorrhœa and menorrhagia, had had gout affecting the great toes in 1882, and later in the year an attack of right-sided hemiplegia, from which she slowly recovered. For some time past her chief difficulty had been from profuse and uncontrollable menorrhagia, accompanied with great pelvic and ovarian pain. Oöphorectomy was performed April 23; the patient recovered without a complication and left the hospital free from all symptoms.

Case IV.—Mrs. B., was admitted Feb. 3 with a large abdominal swelling, which had been twice tapped in the median line for what the physicians in attendance pronounced a multilocular ovarian cyst. An examination under ether rendered this diagnosis exceedingly doubtful in my opinion and in that of some of my colleagues. I determined, however, with their approval, to operate partly for the sake of exploration and partly to furnish drainage for the intraperitoneal exudation. It was found on opening the belly, that the case was one of encysted peritonitis. During the operation a second large cyst, not opened by the original incision, broke down under my finger and discharged a large quantity of turbid fluid.

A glass drainage tube was used, the peritoneal cavity irrigated with a warm boracic acid solution, and the wound sewed up. She did well for four or five days, but then died suddenly from a rapid extension of the peritonitis.

Herniotomy—Radical Cure. *Case I.* —G. B., a farmer 49 years old, was admitted March 27 with a large swelling which occupied the right half of the scrotum; it was pear-shaped in form and was divided about mid-way between the fundus or base of the swelling and the line of Poupart's ligament by a transverse groove. The diagnosis of complete oblique inguinal hernia constricted in the sac was made without difficulty, the symptoms—constipation, vomiting, etc., all pointing unmistakably in this direction. Herniotomy was performed, in regard to which the following interesting points may be noted.

1. The strangulation was in the sac itself, was due to the contraction of bands of lymph, and was exceedingly tight, so that with safety to the closely adherent bowel it was impossible to get the tip of a director beneath it. It was divided from without inward with delicate touches of the knife. As a consequence of the position of the constriction, the bowel contained in the upper half of the swelling—the part occupying the canal and the region of the external ring, was considerably swollen, reversing the usual shape of hernial swellings in having the larger portion above. The rings and canal were found largely stretched, and at these points the bowel was perfectly free.

In the neighborhood of the contraction there were numerous adhesions between the bowel and the sac.

2. The knuckles of gut below the constriction were found to be black, cold, offensive in odor, and crepitating when handled. It did not seem possible at first sight that they could recover themselves, but a half-hour's delay, during which time they were allowed to rest upon the upper surface of the thigh covered with hot carbolized towels, so improved their condition in every respect that it was deemed safe to return them to the abdomen.

3. The sac contained an exceedingly large quantity of fluid. Within the sac was found a body about the size of the last joint of the thumb, glandular in structure and with a fleshy rounded cord running up from it through the inguinal canal. This cord contained a hard wire-like body which slipped from between the fingers when handled. At first the fluid was thought to be that of a hydrocele and the glandular body to be an atrophied testicle with the accompanying spermatic cord and vas deferens In other words, it was thought that the hernia was of the congenital variety. A little further investigation, however, revealed both testicles *in situ*, and a more careful examination showed that the gland was one of the mesenteric group; the supposed vas deferens proved to be an enlarged hardened lymphatic vessel, and the fleshy mass surrounding it a portion of omentum which had been much altered through its long sojourn outside of the abdomen. The hernia had been irreducible for years.

4. After the removal of this piece of omentum and ligation of the neck of the sac, the sac itself was excised. The fundus of the sac, which was tightly adherent to all the scrotal tissues, was left in place. The different layers of the abdominal wall on each side of the wound were first stitched together with cat-gut, and then the two broad fleshy walls thus obtained were united by silver sutures, cat-gut drainage being used. The lower third of the wound was left open and was packed with strips of iodoform gauze. The patient recovered; only a few drops of pus formed, the temperature was normal after the second day, only three dressings were necessary, and the hernia was cured (?). Three months later there had been no return.

Case II.—T. B., a man 19 years old, was admitted May 5 with a strangulated hernia of the right side, complicated with a retained testicle. The hernia was of the congenital variety, attacks of strangulation were frequent, and the presence of the testicle in the canal rendered the use of a truss almost impossible. The testicle was found atrophied, and was therefore removed. The sac was ligated and excised and the wound treated as in the case just described with the exception that as the whole sac was removed no portion of the wound was left open. Union occurred by first intention—no fever, no pus. Apparent cure two months after the operation.

Concussion of the Brain—Cerebral Localization. J. Mc., a man 45 years old, a laborer, was admitted May 3, in a semi-unconscious condition; there was a history of his having fallen sixteen or eighteen feet from a tree, striking upon his head. There was a slight ecchymosis in the left temporal region.

A horse-shoe shaped flap of the scalp was raised for exploratory purposes. No depression or other evidence of fracture of the skull could be detected, and the flap was replaced. The patient had at that time all the characteristic symptoms of concussion of the brain, together with complete aphasia. When disturbed, he moved all his limbs in the effort to return to the position which he preferred, which was that characteristic of cases of concussion—a lateral decubitus with the legs flexed on the thighs, and the thighs on the abdomen. In about forty-eight hours it was observed that his right leg became motionless and helpless, and in the course of two days more he ceased to use his right upper extremity and no voluntary movement in it could be elicited. I then thought the case was one of rupture of one of the smaller posterior branches of the middle meningeal artery, either from fracture of the internal table, or from the direct result of the injury. The symptoms pointed to a slowly forming clot, creeping upward along the Rolandic line and involving successively the centres for speech, for the lower limb, and for the upper limb. I called a consultation of my colleagues for the following day with the intention of trephining. By the time we met, however, he had begun again to move the right arm and it was decided to wait and watch developments. In a day or two more movement returned in the right leg and before the end of the week he for the first time answered questions and spoke now and then spontaneously. He steadily improved in all respects passing, however, through a period of dementia, during which time he was filthy in his personal habits and occasionally destructive, breaking up his

furniture in order to obtain pieces of wood to chew, etc. After recovering sufficiently to be of use about the hospital, he absconded, though still in a condition of feeble intellect.

Compression of the Brain; Cerebral Localization. A. B., a man about 60 years of age, was admitted in the afternoon of March 14, having also fallen from a tree, striking upon the side of the head. He was unconscious, with all of the symptoms of compression of the brain. There was a scalp wound, which, upon being slightly enlarged led down to sound bone. It was situated behind the parietal protuberance. The only paralysis which was noticeable was facial. As it was clearly a case for trephining, or at least for exploring the skull with that object in view, and as the existing scalp wound threw no light upon the condition, I carefully mapped out upon the scalp the area indicated by the facial palsy and punctured the scalp with a bistoury to indicate the precise point at which I expected to find the brain lesion. A large flap was then raised, and within one-eighth of an inch of my puncture was found a splintered fracture of the skull, with laceration of the brain substance. After beginning the removal of the fragments, the fracture was found to have extended through the inner table in the whole temporal region. The meningeal artery had been wounded and required ligature; the line of fracture extended to the floor of the middle cerebral fossa, but the only point at which brain substance had been actually wounded was at the locality mentioned. The patient never recovered consciousness, but died within a few hours of shock.

Shoulder-Joint Amputation. A. B., 28 years old, was run over by a train which crushed his entire right arm to within a few inches of the shoulder. The hemorrhage had been great, and on his admission he was severely shocked and almost bloodless, showing very little disposition to react. I decided, however, to give him the chance and performed a shoulder-joint amputation, keeping him alive while so-doing by elevation of the extremities, dropping the head over the edge of the bed and using hypodermics of ether, whiskey, and digitalis, and of hot saline solutions. He appeared to re-act very well for an hour or two, and then died suddenly of heart failure. I have regretted since that I did not transfuse directly into a vein, employing either blood, or a saline solution; I shall certainly do so in the next similar case I have.

Excision of the Knee; Dog Bone Peg used. S. C., 22 years old, with a family and personal history of tuberculosis, was admitted to the hospital on May 18, for chronic arthritis of the knee-joint. As immobilization produced no favorable change I performed excision some weeks later, removing a section of the tibia and femur and carefully scraping out the carious cavities which I found in both bones. In bringing them together I used as a bond of union the metacarpal bone of a dog. This had been freshly removed with all antiseptic precautions. It answered very well mechanically, keeping the bones in excellent position; but it was, so far as I could see, of no other special advantage. (This case is reported in detail with remarks on the general principles of bony union, in the *Lancet*, August 18, 1888.)

Bullet Wound. E. D., 23 years old, was admitted March 28 with a bullet wound situated just to the left of the symphysis pubis. After a little search the ball was found to have taken an upward direction and to have lodged in the scrotal tissues just below and in front of the bulbous portion of the urethra. It was extracted by a dissection which bi-sected the lower portion of the scrotum. The urethra was not opened. Cat-gut drainage was used and recovery was uninterrupted.

Transverse Fracture of the Patella. The Aseptic Use of Malgaigne's Hooks. E. H., 30 years old, fell while getting on a train which was in motion, and in the attempt to save himself sustained a transverse fracture of the patella, through muscular action. It was immediately followed by great swelling of the joint and entire disability. A few hours later, with the most careful antiseptic precautions the joint was aspirated, several ounces of bloody fluid being removed; I then brought the bones together from a separation of more than three inches, using Malgaigne's hooks and passing them directly through the soft parts. Irrigation with bichloride was kept up during the operation and the knee was dressed antiseptically, the hooks being included in the dressings. There was no elevation of temperature, and but two dressings in five weeks. At the end of that time the hooks were removed, the line of apparent union between the fragments being scarcely perceptible. The vertical diameter of the patella was the same in both limbs. A posterior splint with the figure-of-eight bandage was applied, and the patient cautioned against undue movement. He, however, kicked around freely in bed and some-

what displaced his dressings, and a few days later I found a separation of the fragments to the extent of perhaps three-eighths of an inch. He was again placed on a posterior splint with a firm figure of eight bandage. He recovered with good fibrous union, and no further separation of the fragments.

Vesical Calculus; Secondary Pyonephrosis. J. P., 30 years old, was admitted April 3 with a history of long standing vesical calculus. This history was easily confirmed on examination, when I found that the stone was probably of extremely large size, and therefore decided upon the suprapubic operation, to which the patient consented. He was extremely weak and had a profuse dysenteric diarrhœa. The night before the day fixed for the operation, he suddenly died and the autopsy, which I conducted the following afternoon, showed a condition of the kidney which made it marvelous that he had lived so long. The entire secreting structure had disappeared and the organs were transformed into multilocular sacs containing enormous quantities of muco-pus. The ureters were dilated to almost the calibre of the small intestine. The bladder contained a calculus weighing 532 grains. The origin of this dilatation of the ureters and kidney in such cases is of great interest, as no appreciable obstacle to the entrance of urine into the bladder is usually discoverable. It seems probable that in some instances the dilatation is brought about by the frequent contraction of the walls of the bladder, each act of this character temporarily interrupting the flow of urine through the vesical end of the ureter. This, taken in conjunction with the extension of inflammation from the bladder by continuity, probably explains the condition. An operation would have been certainly fatal, and I was thankful to have escaped the additional risk of death during the use of ether. The urine was so loaded with vesical *débris* that the condition of the kidney could not be accurately determined in advance of the operation.

Exostosis of Humerus. F. R., 12 years old, had an extensive exostosis of the left humerus, at the point of insertion of the pectoralis major and growing quite rapidly. It was entirely removed through an incision parallel with the bone, bone forceps and a chisel being employed. He recovered promptly.

Psoas Abscess. F. S., 48 years old, was admitted April 20, with the following history. He had never been seriously ill until 1884, when he had an attack of malarial fever which confined him to a hospital for seven weeks. About a year ago he noticed a slight pain on the left side of the pelvis, and about the sacro-iliac juncture. This gradually increased, so that he was unable to perform his work. Last August he first noticed a swelling in the upper portion of Scarpa's triangle. This markedly increased until, when he came to the hospital, it occupied almost that entire region. The swelling was soft, fluctuating, and without *bruit;* there was a slight apparent pulsation, but it was not centrifugal and was merely the upheaval of the mass produced by the femoral artery lying beneath it. As the man was totally disabled and was rapidly losing strength and flesh I evacuated the abscess with full Listerian precautions. It contained an enormous quantity of pus, between one and two gallons, and continued for a short time to discharge freely. It was dressed daily and contracted rapidly, it being necessary at each dressing to shorten the drainage tube. When I last saw him he seemed almost entirely recovered.

Rupture of Bladder and Urethra. W. B., 38 years old, while coupling cars on the Reading railroad was caught laterally between the bumpers, the pressure being applied about equally on both sides from the trochanters to the crest of the ilium. He was admitted May 7, complaining of great pain over the right horizontal ramus of the pubis, at which point crepitus could be felt distinctly. He had moderate symptoms of shock. On catheterization a small quantity of bloody urine was obtained. The following day the abdomen became somewhat distended, but the urine gradually became clearer and the bladder more tolerant of it, until at the end of the fifth day the patient passed spontaneously from four to six ounces of perfectly clear urine. His temperature being then in the neighborhood of 100° and his belly flat and painless, I hoped that the source of the blood had been an unimportant rupture of the urethra. Catheterization was stopped and the patient kept on general supporting treatment. He however gradually developed septic symptoms, and two or three days later, upon the appearance of œdema of the lower portion of the abdomen and the upper part of the thighs, I dissected down and opened the cavity of the pelvis just above the ramus of the pubis, finding it filled with pus and with rapidly disintegrating sloughs of the subperitoneal connective tissue. Drainage and irrigation were employed, but without avail; the man died on the 17th, ten days after the

injury. The autopsy showed a rent in the bladder wall, and another not very extensive one in the membranous urethra. That in the bladder showed an attempt at union of the edges, and it would seem possible that some such union by adhesive inflammation took place early in the case, at about the time the blood disappeared from the urine and the bladder became retentive. Undoubtedly, however, some pelvic extravasation had occurred before this time, but the absence of any general or local phenomena pointing to it was truly remarkable. A continuance of the abdominal distention, high temperature and scanty urine would have led to an exploratory operation; but the subsidence of all these symptoms seemed to make an operation unjustifiable, although it was carefully discussed.

Lymphadenoma With a History of Hernia. B. S., 61 years old, was admitted with the history of the sudden appearance of a tumor just below the line of her left groin, and accompanied with local pain, constipation, vomiting and mild shock. The tumor, she insisted, was precisely similar to one from which she had suffered some years before, and which, she said, the doctor who attended her had caused to disappear by handling. In this history she persisted in spite of careful cross-questioning. The tumor was about half the size of the fist, situated over the saphenous opening, tense and apparently exquisitely tender, so that she could not bear to have it palpated. It was dull on percussion and had no impulse on coughing. She was etherized, when it was found that the tumor was distinctly lobulated. A diagnosis of lymphadenoma was made, though it was thought possible, in view of the history, that there might be a small femoral hernia strangulated in the canal. The growth was cut down upon and removed, but I found there was no trace of a hernial protrusion of any sort. The case is interesting on account of the conflict between the history and the actual condition.

Hemorrhoids. In a case of extensive hemorrhoids in a woman 60 years old, the old operation of ligation was performed. The tumors were left protruding and were dusted daily with iodoform, which is, in my opinion, *the* antiseptic for all operations about the anus. The patient was entirely well in less than two weeks, in spite of her age and of the extensive size of the piles. There was no fever and no development of unpleasant odor after the operation.

Epithelioma. In a case of extensive epithelioma of the lower lip a large portion of the lip and of the soft tissues from the front of the chin was removed. It was found that there was in addition considerable disease of the alveolar process of the inferior maxilla, and I therefore, at the same time, extracted the right lateral incisors, the canines, and the bicuspids, and removed one-half the lower jaw, leaving its lower edge to preserve the contour. There was almost no fever, except for a few hours when a slight erysipelatous blush, the result of tension, made its appearance. The patient was discharged cured in about two weeks.

In addition to these cases, most of which were operative, I may summarize briefly the history of others which came under my care during the three months term of service, many of which were no less interesting. There were ten cases of compound fracture of various bones; in eight of these the highest temperature reached was 100°. In the other two there were other injuries, extensive contusions and subsequent cellulitis, which ran the temperature up for a few days. They all recovered, and all with useful limbs. Of other fractures I may note that in eleven cases of fracture of one or both bones of the leg the average time of stay in the hospital was not more than five weeks. The remaining fractures were simple ones, and included six of the femur, several of the ribs, two of the pelvis (one of which recovered), and numbers of the arm, forearm, and other bones. There were twelve cases of burns and scalds, some of them very extensive. All recovered except one, a woman 60 years old, who died of delirium tremens. Of miscellaneous and unclassifiable cases—contusions, luxations, lacerated wounds, minor abscesses, ulcers, idiopathic erysipelas, urethral stricture, and inflammation, carbuncle, chilblains, necroses, cystitis, sprains, syphilis—there were in the neighborhood of 60 cases, which were worthy of record but which can not be condensed or abstracted without too greatly increasing the length of this paper, the chief object of which will be attained if it serves to call attention to the excellent and extensive charitable work which is being done by the President and Board of Managers of the German Hospital.

1810 South Rittenhouse Square.

—Dr. Roland G. Curtin has been elected Attending Physician, and Dr. W. A. Cochrane Superintendent of the Presbyterian Hospital, Philadelphia.

VALUE OF EXTERNAL EXAMINATION IN OBSTETRIC PRACTICE.[1]

BY CHARLES P. NOBLE, M.D.,
PHILADELPHIA.

The subject of external examination in obstetrics is not so fully appreciated in this country as abroad, especially not when contrasted with France and Austro-Germany. It is not so much the lack of appreciation, in theory, of the importance of external examination which characterizes our country, as the failure to apply in practice this valuable procedure. Being impressed with the utility of external examination as an aid to diagnosis, prognosis and therapeutics in obstetric practice, by my experience and observation in the Philadelphia Lying-in Charity and in private practice, I have chosen this as the subject of the paper I have the honor to read before you to-night.

Abdominal palpation was first described by Mercurius Scipio[2] in 1601, and then by Dionis, Roederer, Smellie and Baudelocque; little importance, however, was attached to it until 1813, when Wigand insisted upon its value and formulated rules for its practice. He failed, however, to impress his views upon the profession. After his time, the method was described, among others, by Velpeau and Chailly, and independently discovered by Hubert; but it remained for Matteï, about the year 1855, to demonstrate its value, not only in the diagnosis of pregnancy, but also for the diagnosis of the presentation and position of the fœtus, and for the purpose of performing version by external manipulation. Tarnier, and his pupils Pinard, Chantreuil and Budin, have succeeded in popularizing this method of exploration.

Auscultation is more generally used in obstetric practice than palpation, owing to the less skill that the former requires. The pulsations of the fœtal heart were first discovered by Mayer in 1818. The discovery was accidental—Mayer was listening for sounds supposed to be caused by the fœtal movements.[3] He did not appreciate the full importance of his discovery. In 1821, Lejumeau de Kergaradec, ignorant of Mayer's discovery, accidentally rediscovered the fœtal heart-tones by auscultation, while endeavoring to listen to sounds produced by the liquor amnii. He presented a memoir on the subject to the Paris Academy in 1821. The ideas of this observer, at first opposed, were soon disseminated throughout Europe; and were defended, among others, by Dubois, Velpeau and Jacquemier. In 1839, Depaul applied auscultation to the diagnosis of fœtal presentations and positions, and after that time all obstetricians adopted it.[1]

As a measure of diagnosis during pregnancy, abdominal palpation not only enables us to establish the fact of pregnancy, but also its duration, the presentation and position of the fœtus, the number of fœtuses present, the life or death of the fœtus, and besides, certain complications of pregnancy such as fibroid tumors of the uterus, ovarian tumors, pelvic exostoses, etc.[2] It will be impossible to give more than a partial presentation of this interesting subject. Aside from the value of abdominal palpation to the obstetrician as a method of diagnosis in ordinary cases of pregnancy—in the knowledge which it affords him of the probability of a normal or a difficult labor, and as the only practicable method of improving his *tactus*—it, together with auscultation, is of the greatest importance in those not uncommon cases of pregnancy in supposed virgins, in which the more usual methods of diagnosis by vaginal examination cannot be employed, owing either to the refractoriness of the patient, or to the hesitancy of the physician to propose such an examination without the strongest reasons therefor. Suspected disease of one of the abdominal viscera is a sufficient excuse for proposing an examination of the abdomen.

The diagnosis of pregnancy, when advanced

[1] Arranged from a paper read before the Northern Medical Association, Sept. 26, 1888.

[2] Charpentier, Encyclopedia of Obstetrics and Gynecology, vol. i, p. 265.

[3] Jaggard, American System of Obstetrics, vol. i, p. 374.

[1] Charpentier, *op. cit.*, vol. i, p. 273.

[2] As showing what may positively or probably be determined by abdominal palpation, I quote from my notes on the lectures of Dr. L. E. Neale, Demonstrator of Obstetrics in the University of Maryland. Points to be determined by abdominal palpation before labor:

I. 1. If the woman be pregnant; 2, the month; 3, primipara or multipara; 4, one or more fœtus; 5, if pregnancy be accompanied by any abnormal condition; 6, presence or absence of extra-uterine pregnancy, with or without normal pregnancy; 7, fœtus alive or dead; 8, situation of fœtus (a) presentation, (b) position; 9, mechanical obstacles to delivery; 10, placenta previa.

During labor. II. 1, if labor has begun; 2, if the pains be true or false; 3, if the pains be regular or irregular; 4, the stage of labor.

After labor. III. 1, The size, shape, consistency, mobility and sensibility of the uterus; 2, presence of clots in the uterus; 3, presence of tumors; 4, condition of the uterine adnexa (whether sensitive, inflamed, or not); 5, tympanites.

beyond the fourth month, can usually be determined readily by abdominal palpation. During the early months the most important diagnostic points are: the central position of the tumor; its consistency; and most of all, the fact that at more or less regular intervals the consistency of the tumor alters markedly—instead of being doughy and compressible it becomes hard, and its contour is more readily determined. The observation (the knowledge of which we owe to Braxton Hicks) of the latter phenomenon, which continues throughout pregnancy, practically settles the diagnosis. Pinard,[1] perhaps the greatest authority on obstetric palpation, considers this sign as not positive, but only probable, of pregnancy; but since he only urges two conditions with which it may be confounded—the contractions of a greatly distended bladder, and of a subperitoneal uterine myo-fibroma—these contractions of the uterus may be accepted as practically a positive sign of pregnancy. By the use of the catheter, or in exceptional cases of distended bladder from retro-versio uteri gravidi, of the aspirator, the diagnosis of distended bladder may be positively established. The probability of mistaking a subperitoneal myo-fibroma for a pregnant uterus is so slight as to merit attention only as a remote possibility; certainly, the observation of the rhythmic contractions of the uterus is a more certain sign of pregnancy than ballottement, which is universally admitted as a positive sign. Among other conditions, aside from pregnancy, which have actually given the sensation of ballottement, may be mentioned:[2] a multilocular cystoma of the ovary (Pajot); a small ovarian cyst with a long pedicle; the non-pregnant anteflexed uterus (Cazeaux); the pregnant womb itself, floating in ascitic fluid (Robert Barnes); a wandering kidney; and a calculus resting on the *bas-fond* of the bladder (Cazeaux). Pinard might have urged another condition — which would likely be confounded with normal pregnancy—tubal pregnancy, going on to term without rupture of the tube. Hæmatometra has also been mentioned as a possible source of error in diagnosis.

About the middle of pregnancy, in addition to the signs mentioned, abdominal ballottement can be obtained. Either the whole fœtus, or simply the head can be ballotted. Even before this time the active fœtal movements may be felt, as was first shown by Pajot[1]; and by the aid of auscultation they may be perceived after the third month. This sign, of course, not only establishes the fact of pregnancy but also the life of the fœtus. During the last half of pregnancy the fœtus can be made out, and usually its exact situation, without difficulty.

Auscultation affords great assistance in the diagnosis of pregnancy. The recognition of the uterine souffle was formerly regarded as a positive evidence of pregnancy; but it is now known that similar sounds can at times be heard over uterine fibroids and ovarian tumors. The recognition of the fœtal heart-tones, however, is positive evidence both of pregnancy and of the life of the fœtus. The sounds of the fœtal heart are heard, according to Depaul, after the third month; most authors, however, say after the fourth month. Charpentier[2] states that he has never heard them before the middle of the fourth month, but that after that time he has always found them, provided the fœtus was living. Depaul in 906 cases, examined during the last three months of pregnancy, failed to find the fœtal heart sounds in but 8 cases; and Anderson, of Glasgow, in 180 cases failed to find them in but 12 cases, and in these cases the children were still-born. The theory of Frankenhäuser, that the sex of the fœtus can be determined by the frequency of the cardiac pulsations, has not been generally accepted. According to Hecker and Schroeder, the fœtal souffle is heard in from 14 to 15 per cent. of all cases. The fœtal souffle is a single or double blowing murmer, isochronous with the fœtal heart beats. Its discoverer, Evory Kennedy, regarded it as due to mechanical interference with the circulation in the cord. Various other explanations have been given of its occurrence; it is known to be due at times to disease of the fœtal heart, as hypertrophy of the right ventricle, with insufficiency of the tricuspid and mitral valves, with vegetations on them. Its recognition cannot be considered of much practical moment, nor is this easy. In the course of my investigations I have never observed it. The active fœtal movements can be recognized not only by palpation but also, and much earlier, by auscultation. Pajot in particular has studied this subject. At the end of the third

[1] Pinard. Treatise on Abdominal Palpation, p. 8.

[2] Jaggard. American System Obstetrics, p. 373, vol. i.

[1] Pinard. *Op. cit.*, p. 10.

[2] Charpentier, *loc. cit.*, vol. i, p. 276.

month a bruit is produced comparable to the sound caused by the tapping of the finger against a tense membrane. This sound is caused by the total displacement of the fœtus. Toward the end of gestation the sound is caused by movements of the extremities. If the stethoscope or ear be applied over the uterus, during active fœtal movements, both the delicate bruit and the sense of shock caused by the impact of the fœtus or its extremities against the uterine wall, can be heard and felt. The recognition of the fœtal movements by the skilled observer is positive evidence of pregnancy and of the life of the fœtus, and is a valuable aid to diagnosis in the fourth month.

The value of palpation in establishing the diagnosis of the presentation and position of the fœtus can scarcely be overestimated. It has been urged that before labor the presentation of the fœtus is a matter of little importance, and that during labor vaginal touch affords all necessary information. This argument is certainly fallacious. It might perhaps be a matter of little importance what part of the fœtus offered at the superior strait during pregnancy, if pregnancy was not to be terminated by labor; and again, if all presentations of the fœtus were normal, and labor equally easy and safe in each of them, it might not matter that the accoucheur possessed no knowledge of the relation between the fœtus and its mother except that obtained by vaginal examination at his first visit after the advent of labor. But these conditions do not hold. It is generally recognized that vaginal examination during pregnancy to discover the presentation and position of the fœtus, and the relation of the diameters and circumference of the presenting part of the fœtus to those of the pelvis, except under unusual conditions, is impracticable. The same is not true of external examination. Besides, more exact and greater information can be obtained during pregnancy by external than by internal examination. Of course neither method of examination is to be employed to the exclusion of the other. The knowledge obtained by each method is complementary to that obtained by the other. Fortunately, however, such complete information is usually obtained by external examination as to render internal examination unnecessary during pregnancy. In a given case, with the presentation and position of the fœtus, and the capacity of the pelvis made out during the eighth or ninth calender month, the obstetrician occupies a very different position from what he would were these facts unknown to him. Should nothing abnormal be discovered he has the assurance that no serious mechanical obstacle to delivery will be encountered during labor. Should abnormality of the fœtus, of its presentation, or of the maternal pelvis be discovered, he is forewarned, and is enabled to institute the proper obstetric treatment at the proper time—whether this be version, the induction of premature labor, or other obstetric procedure.

Auscultation is of special use in diagnosticating the presentations and positions of the fœtus *in utero*, as first pointed out by De Kergaradec. According to Depaul the fœtal heart is so situated as to be nearer the cephalic than the pelvic extremity, and since the attitude of the fœtus is that of anterior flexion, the heart-sounds are most easily transmitted to the ear through the back. The point of maximum intensity will be over the fœtal dorsal region, corresponding to the fœtal pericardium. If the fœtus be presenting by the vertex, this point will be below a horizontal line dividing the uterus in two equal parts: the umbilicus cannot serve as an accurate landmark owing to its variable position. In pelvic presentations, on the other hand, the fœtal heart will be heard with greatest intensity above this line—in the upper part of the uterus. While the conclusions of Depaul are nearly universally admitted,[1] a part of his premises have been shown by Ribemont to be incorrect. This observer has shown by means of frozen sections that the fœtal heart is about equidistant from the poles of the fœtal ovoid; and that the explanation of the fact that the fœtal heart is heard most distinctly below the horizontal line in vertex presentations, is found in the engagement of the head, which occurs before labor in this presentation but in no other. This theory is undoubtedly correct, and amply explains the fact that, in those cases of vertex presentation in which lack of relation between the size of head and the capacity of the pelvis prevent engagement before labor, the fœtal heart-sounds are heard most distinctly at or near the horizontal line. In this way, presentations of the vertex or breech are distinguished. According as the heart is heard most distinctly to the right or left of the linea alba, the position is right or left. Auscultation is of doubtful value in the diagnosis of face

[1] Tarnier and Chantreuil have stated that in cases of placenta previa, deformed pelvis, large fœtal head, or other condition which prevents the head from engaging, the fœtal heart may be heard above the horizontal line.

and shoulder presentations. By combining it with palpation, however, the diagnosis can be made. But since face presentations are rare during labor, and infinitely more rare during pregnancy, the method is of theoretical rather than of practical value in these cases. The same rules apply to the diagnosis of the presentation and positions during labor by auscultation, except that as the presenting part sinks down in the pelvis, the fœtal heart is heard at a correspondingly lower point.

During labor, abdominal palpation affords valuable information, and that, too, without entailing any danger upon the patient. Modern investigation has shown the danger of conveying sepsis to the patient by frequent "touching," unless the strictest antiseptic measures are employed; and even when this is done frequent touching is to be deprecated. I by no means accept the teaching of some, as Credé, that abdominal palpation alone shall be employed during labor, except under peculiar circumstances; but I do believe that vaginal examination is abused at the present time. When the presenting part is "high up," palpation affords much more accurate information than internal examination, which under these circumstances gives notoriously incomplete and unsatisfactory results. It is not my purpose to discuss this question from the medico-legal aspect—a reference to the recent discussions upon this point before the Chicago Gynecological and Medico-Legal Societies being sufficient to indicate the drift of professional opinion at this time. In ordinary labors, then, palpation should be employed because sometimes it yields the same, sometimes greater information than vaginal examination; and in all cases the information gained by touch is supplemented, confirmed, or corrected by that obtained from external examination. In long tedious labors, by inspection and palpation alone can we determine the state of the uterus, and especially its lower segment—important matters in such labors, affording an indication for artificial delivery, or, when this has been neglected, giving a warning of approaching rupture of the uterus.

Auscultation, moreover, should not be neglected during labor, though the information it affords relates rather to the fœtus than the mother. In this way alone can we derive reliable information concerning the condition of the fœtus. Kilian, in 1849, formulated what is sometimes called the "stethoscopical indication for forceps delivery." When the fœtal cardiac pulsations increase in number to 180 per minute, or diminish to 100 or less; and when at the same time they lose their purity of tone; when distinct intermissions occur, or when only one sound can be distinctly heard—the life of the fœtus is seriously threatened, and forceps delivery is indicated. This usually occurs in tedious labors, especially during the second stage, and is brought about by the prolonged compression to which the fœtal head and trunk are subjected. In deciding the question, when to conclude a tedious labor artificially, the condition of the fœtus as well as of the mother should be considered. I have seen the suggestion that the fœtal mortality, in labor, is somewhat increased by the efforts of obstetricians to delay labor during the stage of perineal distention, in order to preserve the integrity of this structure. This suggestion deserves consideration, and the condition of the fœtus, as indicated by the character and frequency of the heart-sounds, should be determined before effort is made to lengthen this period of labor.

Palpation after labor is so generally practiced, and its value as affording accurate information concerning the uterus and adnexa and the abdominal viscera so thoroughly appreciated, that a brief *résumé* of a few of its most important applications must suffice. Immediately after labor, palpation gives information of the tone of the uterus, and the hand resting gently on the abdomen over the uterus readily appreciates any alteration in the consistency of that organ. The practice of allowing the hand to rest gently over the uterus, for some time after labor, cannot be too strongly commended. In no other way can post-partum hemorrhage be so surely prevented; because relaxation of the uterus is immediately appreciated and measures to secure its contraction can be taken at once. Gentle friction of the uterus, during the natural contractions, assists in expelling clots and preventing afterpains.

Daily palpation of the abdomen during the first days of the puerperium should never be neglected. The condition of the uterus and adnexa can thus be known from day to day. The information gained in this way is scarcely less valuable, in indicating the progress of the case, than that afforded by the observation of the pulse and temperature. In a normal puerperal case the uterus during the first three or four days is found in the hypogastrium, well contracted, and not sensitive to pressure. After the third or fourth

day it rapidly diminishes in size, so that at the end of a week or ten days it is scarcely palpable from the abdomen. The adnexa during this time, are not painful on pressure. By daily palpation any deviation from this course is at once discovered. The process of involution is markedly influenced by intercurrent diseases, especially by septic or putrid infection. Indeed, the beginning of septicæmia or putrid infection is indicated by the large, relaxed, sensitive uterus, almost as soon as by the increased bodily heat, or rapidity of the pulse. This is especially true when the uterus is the site of absorption. It should be mentioned, also, that palpation offers the surest means of differentiating between after-pains of spasmodic character—perhaps induced by ergotism—and those caused by a relaxed state of the uterus, which favors passive hemorrhage and the retention of clots. The indications for treatment in the two classes of cases being radically different, a correct differentiation is essential for satisfactory therapeusis.

A practical matter, while not strictly apposite, may be mentioned here. It is the physician's duty to see that the nurse follows his directions, especially with reference to the cleanliness of the patient, her bed, and clothing. A clean bed-spread and some attar of roses, may conceal from the physician, who neglects palpation during the puerperium, a very dangerous condition. Indeed it is well known that lazy nurses in this way endeavor to conceal the results of their negligence. Unclean bedding, or undergarments, or putrid discharges, can scarcely escape the attention of the physician who examines the abdomen as a useful routine practice at his daily visit. By stooping over the patient the nose can be brought sufficiently near the pubes to detect even a slight putrescent odor, and that without attracting the patient's attention or wounding her sensibilities.

Surely, the man who employs all the resources of his art is likely to be the most accurate diagnostician and successful practitioner.

—Professor Osler, whose election to the position of Professor of the Practice of Medicine in Johns Hopkins University was announced in the Reporter, October 13, will not enter upon his duties there until next May. During this winter he will continue to fill the position of Professor of Clinical Medicine at the University of Pennsylvania.

THE INFANT'S PULSE.

BY WILLIAM A. EDWARDS, M.D.,

INSTRUCTOR IN CLINICAL MEDICINE AND PHYSICIAN TO THE MEDICAL DISPENSARY IN THE UNIVERSITY OF PENNSYLVANIA; PHYSICIAN TO ST. JOSEPH'S HOSPITAL AND TO THE DEP'T FOR DISEASES OF CHILDREN; FELLOW OF THE COLLEGE OF PHYSICIANS; ETC., ETC.

Notwithstanding the importance that is attached to the pulse in adult practice, it is somewhat remarkable that its characteristics in early life are almost unrecorded. It is true that Valleix and Trousseau have formulated their observations on the pulse of the healthy infant, but, unfortunately for practical use, these gentlemen do not agree in their statistics. Cardiac pulsations are of clinical importance very early in fœtal life. Mayor, in 1818, was probably the first to put this knowledge to practical service. He was followed by Frankenhäuser who still further investigated the fœtal heart sounds; and very recently, such an authority as Jacobi has stated that he was rarely mistaken in diagnosticating the sex of the fœtus by the character and rhythm of the heart sounds.

In endeavoring to establish a normal standard of the pulse from the moment of birth up to the end of the first year one is met by many difficulties. It is with difficulty that the pulse can be recorded for the first hour after birth; sometimes not until ten days have elapsed can the pulse at the wrist be counted with any degree of accuracy. The first alteration in the pulse after birth is a decrease in its frequency; within an hour it will settle down to an average beat of 136, whereas before birth it has fluctuated between 124 and 150. During the first eighth to quarter-minute after birth the heart pulsations are not discernable; then they commence slowly, so that by the first half-minute they are probably not more than 10 or 12 per minute. At this time a vigorous child will cry, and the pulse rate will become rapidly increased, possibly up to 160, settling down in a short time to between 136 and 140.

Trousseau states that the average pulse of the healthy infant between the first and second month is 137 a minute; from the third to the sixth month 128; and from the sixth to the twelfth month 120.

The infant's pulse is more rapid while it is awake, especially if it is sitting or standing. Muscular or mental emotion may cause the pulse to become extremely rapid; this

rapidity is most marked in feeble children. Sleep reduces the number of pulse beats very materially. As the child grows older the pulse becomes less impressionable; the child at six years presents an average pulse of 100, and at thirteen one of 88.

The most marked characteristic of the infants pulse is *irregularity*, which occurs whether the child is asleep or awake, at rest or in active movement. Conditions which will hardly perceptibly affect the pulse of the adult will derange the rhythm of the infants pulse to a marked degree; disorders of digestion so common in infancy show marked effect upon the pulse rhythm. Irregularity is also seen during constipation or diarrhœa, and is associated with intestinal worms and with dentition. An important and as yet unrecorded difference between the infant's pulse and that of the adult is the fact that in the former there is an entire absence of dicrotism, and it does not appear until the child has reached the tenth to fourteenth year. Space forbids a full discussion of this peculiarity, but suffice it to say that the infant's pulse has not the same recoil as the adult's; it has furthermore been demonstrated that blood-pressure in the young is very low, and that dicrotism in the adult pulse is produced by conditions that do not exist in the infant. It is also well known, since Marey demonstrated the fact, that the longer the vessel, the greater the dicrotism. Infants present great variability in the size of their arteries; in some of the diatheses the blood vessels are much altered; for example, rickets is attended by large arteries. On the other hand the arterial system may be unduly small. I have elsewhere called attention to this congenital smallness of the arteries. The character of the pulse in infants is difficult to describe; it yields readily to the finger of the observer, is small, irregular, and does not present any marked difference between systole and diastole. One observer aptly remarks that the pulse of infants is deprived of sense, rules, or proportion—a description to which I hesitate to add a single word, so liable is the pulse to be affected by most trivial departures from health. Even a slight accumulation of flatus, for instance, will so alter the pulse that, judging from it alone, one could not avoid concluding that the little patient was the subject of a grave disease.

While irregularity in rhythm may be considered one of the normal features of the pulse, it is not so, however, with *persistent frequency* which is always a manifestation of cardiac overstrain, no matter how young the child may be; it also occurs in association with anæmia, leukæmia, and malarial intoxication in babes. The frequent action may be constant or paroxysmal in its appearance.

Occasionally in infants we meet with exactly the opposite condition, namely, *infrequent pulse*, which is usually congenital, although I have several times observed an infrequent pulse associated with the jaundice that is common during the early months of life, and also with renal disorders. The congenital cases are liable to present also evidences of cerebral disturbances, great mental excitement or epileptiform attacks.

Society Reports.

AMERICAN SURGICAL ASSOCIATION.

ANNUAL MEETING, AT WASHINGTON, D. C., SEPTEMBER 18, 19 AND 20, 1888.

Thursday, Third Day, Sept. 20.

MORNING SESSION.

George W. Gay, M.D., Boston, read a paper on

The Comparative Merits of Tracheotomy and Intubation in the Treatment of Croup.

Dr. O'Dwyer's method of intubing the larynx has now been before the profession in a prominent manner about three years, and it is surely gaining favor as its merits and its limitations are being more clearly understood.

The operation has its advantages and its disadvantages. It gives relief to the dyspnœa and it saves lives. The statistics of recovery vary much, as in tracheotomy. Twenty-six per cent. is a fair average after intubation. The recovery rate in 327 tracheotomies performed at the Boston City Hospital, was 29 per cent. In about 100 cases of intubation performed at the same institution the rate of recovery was 26 per cent. showing a little smaller percentage than the old operation. It is not claimed that these figures and facts are conclusive. The number of intubations is, as yet too small to settle the question. The recovery of patients under three years of age was in the same proportion after each operation, namely 12 per cent.

O'Dwyer, Brown and Waxham save about one in four after intubation; Huber and

Montgomery save one in two; Northrup and Denhard save one in five; Jenning, one in ten; Chatham, one in fifteen; and A. B. Strong, one in thirty-one. This variation of results in the experience of different operators, proves conclusively that the type of the disease determines the result to a great extent, far more in fact, than any mode of treatment.

The conclusion on this point is that the new operation saves nearly or quite as many patients as did the old.

In regard to the facility of doing intubation, it may like tracheotomy be easy or difficult, according to the age of the child, the condition of the larynx and the strength of the patient. Both operations are difficult in children under three or four years of age and both are attended with some danger. In tracheotomy the risk lies principally in hemorrhage and collapse. In intubation it lies in pushing membrane, etc., down in front of the tube, producing more or less complete obstruction. In very weak children collapse may result from prolonged efforts at placing the laryngeal tube. Under these circumstances the surgeon should choose the operation with which he is most familiar. The old operation can be done with one good assistant. Intubation requires at least two fairly good ones. Unless great care be taken the operator's fingers may be severely bitten, which in at least one case, has resulted in death.

It is desirable to have a physician close at hand for 3 or 4 days after both operations. If the tube must be allowed to take care of itself intubation is preferable. If ordinary care, such as a good nurse or other clever person can give, is available in cases located at a great distance from a physician who can place O'Dwyer's tubes, then the old operation is better, there being less danger of fatal obstruction and the question of feeding giving less anxiety.

The weight of testimony goes to prove that it is less work to take care of intubated than of tracheotomized patients. The time occupied in caring for the tube in the latter class, is largely taken up in feeding the former class of patients.

Northrup's statistics of 107 autopsies performed at the N. Y. Foundling Hospital go to prove that there is no such thing as "food pneumonia," as in no instance were signs of food found in the smaller bronchi. Dr. O'Dwyer advances the opinion that the secondary lung affections, especially of pneumonia, are due to retained secretions which, owing to the presence of the tube in either operation, cannot be ejected by coughing. Others think that this complication is due to the fact that the air enters the lungs without first being warmed and moistened by passing through the nasal chambers. The author ascribes these affections to the natural tendency of exudative processes to extend in all directions, and bases the opinion upon the fact that pulmonary complications are as frequent in cases not receiving surgical treatment, run the same course and are as fatal as in those in which operation is resorted to.

While a wound in the skin is objectionable on general principles, yet the wound of tracheotomy gives little trouble and does little harm. The diphtheritic poison gains admission to the system before the wound exists and the course of the disease as regards sepsis is the same after as before the operation. In only six of the 327 operations at the City Hospital of Boston was diphtheria in the wound noted; three of these cases recovered. Both tubes may produce ulceration in the trachea, but the result is seldom serious.

Conclusions.—1. Intubation may be tried in all cases of croup.

2. It is preferable in young children and in cases in which the tube must be left entirely to itself.

3. It may be resorted to for euthanasia, provided the operator is reasonably expert and can do it without producing collapse.

4. Tracheotomy is called for in those cases in which intubation can not be done or in which it fails to give relief; or in which the laryngeal tube is repeatedly ejected or requires frequent removal for cleansing. It may also be required in those cases in which sufficient food can not be given while the O'Dwyer tube is in position. It is also preferable in cases situated at a distance from a surgeon capable of introducing the laryngeal tube.

5. The tracheotomy instruments should always be at hand in intubation in case of emergency.

In opening the discussion on the paper of Dr. Gay, Dr. H. H. Mudd, St. Louis, said that intubation had been done as a precautionary measure in many cases, in which tracheotomy would not have been thought of. Some of the good results of intubation are to be attributed to this fact. In most of his cases of intubation where the patient survived he had found it necessary to resort to tracheotomy. Patients have recovered after tracheotomy where intubation has proved unsuccessful.

Prof. Thomas Annandale called atten-

tion to the value of the introduction of a tube through the glottis in cases of operation about the throat where there was risk of suffocation or of hemorrhage into the trachea.

Dr. Huber, of New York, had performed intubation in 94 cases with recovery in 37. He does not operate early. He considers the internal use of bichloride of mercury as of equal importance as the intubation. There is occasionally an advantage in using a small tube with the expectation that it will be coughed out and with it a portion of the membrane, and affording an opportunity for feeding while the tube is out.

Dr. T. F. Prewitt, St. Louis, in one case of diphtheritic paralysis had, in order to avoid passage of fluid into larynx, passed a catheter through the glottis and plugged the larnyx with a sponge. This permitted the fluid to go into the œsophagus without risk of entering the trachea. After feeding, the sponge and tube were removed.

Dr. D. W. Cheever, Boston, advocated the disuse of anæsthetics in cases of tracheotomy provided proper assistants can be secured. The operation is not accompanied with much pain. By avoiding the anæsthetic many of the risks of the operation are avoided.

The next paper, by Dr. L. McLane Tiffany, of Baltimore, was entitled

Pregnancy and Operative Surgery: Their Mutual Relations.

The following conclusions were presented:

Conclusions: 1. Pregnancy is a physiological condition and does not contra-indicate a surgical operation. 2. During pregnancy temporary strain may be exerted on some organ, *e.g.*, kidney, inducing impairment of function. 3. A surgical operation upon a pregnant woman is to be conducted so as to avoid inducing abortion, in itself a serious accident. 4. The main cause of abortion after operation is sepsis. 5. The probability of sepsis after operation is increased if the patient is suffering from disease, either temporary or chronic. 6. Abortion may result from operation—shock perhaps. 7. Hæmorrhage does not seem to induce abortion. 8. Union of fracture may be retarded by pregnancy. 9. Recorded cases show that the unborn child receives no evil impress when the mother is subjected to operation. 10. When a surgical operation upon a pregnant woman is under consideration, the function of all the patient's organs must be carefully investigated and regulated. An operation then conducted antiseptically may be expected to result as though pregnancy were not present.

Dr. J. Ewing Mears, Philadelphia, in opening the discussion, thought that while pregnancy was to be regarded as a physiological process in the native woman, it could not be considered in this light in the society woman. Another important point to be considered was whether the operation required was one of expediency or of necessity. In the latter case the surgeon must do his duty let the result be what it may; but whether or not operations of expediency were to be performed on the pregnant was a question only to be decided by further experience.

Dr. P. S. Conner, Cincinnati, reported a case of subcutaneous operation for anchylosis of the knee in a woman who it was subsequently learned was six weeks pregnant. The operation was followed by severe septic infection, but this did not interfere with the normal course of the pregnancy.

Dr. William Hunt, of Philadelphia, raised the question whether or not in the case of inevitably fatal injury of a pregnant woman, as from burns, it was justifiable to run the risk of sacrificing the mother a few days sooner, when by so doing the life of the child might be saved, or must we wait until the last breath has left the body before making the incision?

Dr. R. B. Bontecou, Troy, reported the case of a rupture of an umbilical hernia in a woman seven months pregnant. The intestines were out four hours. They were then cleaned and replaced. The woman recovered, and a healthy child was born one month later.

Dr. L. McLane Tiffany, of Baltimore, thought that in the case suggested by Dr. Hunt, there could be no question as to the propriety of operation. By so doing, one life may be saved.

Dr. N. P. Dandridge, Cincinnati, read a paper on

Nerve Stretching.

The following conclusions were presented: 1. That nerve stretching should be condemned in all forms of central disease, such as tabes, myelitis, etc. 2. That it offers little prospect of relief in tetanus. 3. That it should be regarded as a reliable method in cases of persistent neuralgia and peripheral paralysis of sensation in the extremities. 4. That stretching the facial is indicated in tic-convulsive. 5. That further trial is justified in reflex epilepsy. 6 That stretching the lingual should be tried in painful affections of the tongue. 7. That resection should always be preferred to stretching in

the spinal accessory and in the branches of the fifth nerve, except the lingual.

AFTERNOON SESSION.

Dr. De Forest Willard, Philadelphia, read a paper on

Nephrectomy.

1. Gun-shot wound of the kidney.
2. Tubercular disease of the kidney.

Case I.—Male, mulatto, æt. 17, was shot July 10, 1887, at such close range as to burn clothing and skin. He was able to walk one-fourth of a mile to the hospital, and the shock was but moderate. Symptoms of internal hemorrhage steadily increased, and when seen by Dr. Willard, four hours after the injury, the signs of collapse were imminent. The ball entered just above the 11th rib, three and one-half inches from the spinous process. There was no wound of exit. Almost pure blood was voided from the bladder and continued to flow freely. The entire left side of the abdomen was dull on percussion, and there was every evidence that there had been an escape of intestinal contents as well as urine and blood into the peritoneal cavity.

Abdominal incision was therefore chosen as best suited to arrest hemorrhage, repair injured organs and remove clots. The bladder was found full of blood, but uninjured. Ureters, the same. The huge hæmatocele was found to be retro-peritoneal, filling all the tissues in the loin and downward into the pelvis. The left kidney was traversed by the ball from the centre of the rim to the infundibulum, and the renal artery and vein cut. Aseptic silk ligatures were applied and the organ removed. The ball had passed behind the peritoneum without injuring other organs and could not be found. No blood or fæces were found in the peritoneal cavity. The sight of the extirpation was thoroughly mopped with sublimate solution, 1–10,000, made with boiling distilled water, and the abdomen irrigated with hot distilled water. The utmost precautions were taken to prevent infection and all the dressings were thoroughly antiseptic. The temperature during the next four days varied from 99.4° to 101.4°. About 20 ounces of slightly albuminous urine were secreted daily. The skin was kept active and no signs of uræmia at any time made their appearance. The patient, however, died of loss of blood, shock and exhaustion eighty-six hours after the injury. At the post-mortem no blood or pus was found in the peritoneal cavity and the adhesions between the serous surfaces were very slight. There was no pus at the sight of the nephrectomy and the hæmatocele was perfectly aseptic. The ball had grazed the 11th rib, passed just below the pleura without entering it, had perforated the diaphragm, left kidney, the renal artery and vein and the sheath of the aorta just at the origin of the renal artery, being found lying directly upon the aorta. The right kidney was healthy.

In his remarks Dr. Willard dwelt upon the advantages of abdominal incision, where the probabilities of other organs having been injured, were so great; as hemorrhage could be arrested, perforations repaired and escaped fluid removed. Drainage through the loin or abdomen was not advisable, provided urine had not escaped into the peritoneal cavity before the operation. The hæmatocele if large and retro-peritoneal could not be thoroughly removed and should therefore be allowed to remain undisturbed. All fluids in the abdominal cavity should be removed.

The three primary nephrectomies for gun-shot wound thus far reported have all been done by Philadelphia surgeons. Keen (Trans. Amer. Surg. Asso. vol. v, p. 193) removed the left kidney of a girl of 18, in whom the ball had perforated the stomach, liver, spleen and kidney. This patient died on the 15th day. Price (Trans. Penna. State Society, 1888) removed the right kidney in a girl of 14, in whom the liver was also perforated. His patient recovered after multiple abscess of the liver. Dr. Willard's case died on the fourth day. In none of these cases was there anuria.

Nephrectomy for Tubercular Kidney.

Case II.—Female, æt. 32, married 8 years but never pregnant. Tubercular history of ancestry uncertain. Failing in health for ten months. Seven weeks ago first noticed tumor in right side of abdomen. Has had increasing pain in this region. This is now very severe at times. Has emaciated rapidly. Temperature varying from 99° in the morning to 101° in the evening. Diarrhœa quite constant. Passes large amounts of pus in the urine. Urine 1-6 albuminous but contains no casts and no distinctive cell elements. Tumor rounded in form occupies the space from the right renal region forward to linea semilunaris and vertically from lower margin of liver to line of anterior superior spinous process. Indistinct dullness extending into pelvis. Resonance between liver and tumor. Tumor movable.

Diagnosis uncertain as to purulent kidney or sarcoma of kidney. The size of the tumor and its projection forward determined the selection of the abdominal median incision. The right side of abdomen was found filled with thick sack giving indistinct sense of fluctuation. From it extended downward, two elongated masses, one evidently a pus-filled ureter, and the other a mass extending down from the external iliac vessels and passing under Poupart's ligament. Puncture evacuated only a few drachms of pus and did not diminish its size. Tearing open the sac the kidney was found riddled with multiple abscesses. The vessels and the ureter low down, were tied with silk ligatures and the kidney removed. The abdominal cavity was irrigated with distilled water, drainage tubes inserted behind the uterus and into the site of the nephrectomy, and the wound closed with one set of sutures. The woman was exceedingly low during the operation, but rallied so that the temperature rose to 99° and she became perfectly conscious. Two hours after operation she suddenly sank and died.

The post mortem showed that behind the suppurating kidney and in a separate sack, divided from it by a wall two lines in thickness, was another pus sac. This sac was three inches wide and the pus had worked its way down the aorta, common iliac and iliac arteries to Poupart's ligament. If nephrotomy had been attempted this sack might have been drained and the kidney never reached at all. No hemorrhage after operation. Death from shock. The other kidney was enlarged but not diseased.

In opening the discussion, Dr. W. W. Keen, Philadelphia, said that blood exuded between the folds of the peritoneum was not a source of danger and that it might be left without interference. If we could make out that the kidney alone was injured the lumbar incision would be the proper one. Where there is a probability of injury of other structures, the abdominal incision is the best.

Dr. James McCann, Pittsburg, reported a case of nephrectomy for multiple abscess in which the patient died suddenly six hours after operation.

Dr. L. McLane Tiffany, of Baltimore, held that in simple gunshot wound of the kidney the proper plan was to drain the kidney through the lumbar region and not to perform nephrectomy.

Dr. Chas. T. Parkes, Chicago, reported a case of gunshot injury of the abdomen, in which in addition to a number of perforations in the bowel the ball entered the kidney. The intestinal wounds were closed. No operative procedure was performed on the kidney. The patient died from hemorrhage from the kidney 24 hours later.

Dr. Keen thought that in the condition referred to by Dr. Tiffany, the proper plan was to drain, but where there is much injury of other parts the patient will stand a better chance if the wounded kidney is removed.

Dr. Robert F. Weir, New York: If there is simply a gun-shot wound of the kidney, the organ should be thoroughly exposed in order to ascertain the extent of the injury. Then thorough drainage should be employed and to guard against hemorrhage, the wound should be tamponed with iodoform gauze.

Dr. H. H. Mudd, St. Louis, reported a case of lacerated wound of the kidney in which drainage was adopted. Irregular fever and loss of strength supervened and 51 days after the injury the kidney was removed. The whole organ was in a state of parenchymatous nephritis.

Dr. C. B. Nancrede, Philadelphia, had in his paper last year recommended that in gun-shot wounds of the abdomen involving the kidney, an attempt should be made to save the organ when that was possible. He had also suggested packing of the kidney to prevent hemorrhage.

Dr. R. N. Isham, of Chicago, considered hæmaturia a pathognomonic sign of injury of the kidney. There are two forms of laceration of the kidney, those in which the capsule is involved in the injury and those in which it is not. In the first operation will probably be required. In the second no operative procedure may be required.

Dr. David W. Cheever, Boston read a paper on

Shock.

The operative surgery of our time has annulled pain, arrested hemorrhage, averted septic absorption, but it has not prevented shock. The object of the paper was to inquire whether or not modern surgical procedure had diminished shock, wherein it fails to do so, and to suggest improvement of its defects. A simple description of the degrees of shock is: apprehension, fluttering, sweating, chilliness, pain, vertigo, nausea, faintness, convulsions, unconsciousness and collapse. Moderate shock terminates in reaction. Severe shock is more lasting and is a condition where a feather turns the scale against the patient. An operation at this period causes renewed and prolonged shock. The effect of modern surgery has

been to diminish primary shock and to increase secondary shock. The time of an operation since the introduction of anæsthetics has been much prolonged. Do we realize what this prolonged cutting, pinching and dissection mean to the nervous system? It is unphilosophical and fatal to operate in cases of primary shock before reaction has come on. The golden moment of fairly established reaction must be seized before traumatic fever sets in. This moment comes in from six to eighteen hours after the injury or it never comes. Anæsthesia does not diminish existing shock, but only annuls the additional shock from pain produced by cutting. If prolonged it adds to the secondary shock. There is lowering of bodily temperature after operation under anæsthesia, even to 97° or 96°. This is due to the anæsthesia which, if prolonged, ends in dripping sweat; to careless exposure of patient; largely to antiseptic irrigation, and to the application of cloths wet with antiseptic solutions around seat of injury. Nausea frequently follows anæsthesia. This is one of the marked symptom of severe shock. It is a most dangerous factor in preventing reaction.

In order to diminish shock: 1. wait for reaction. 2. Never neglect to calm the mental state by a cheerful word and personal presence. 3. Give alcohol a quarter of an hour before anæsthetics. 4. Make the anæsthesia short. 5. Operate as rapidly as possible. 6. As short dressing as possible. 7. Avoid chilling of the patient.

To promote reaction after operation: 1. Persistently and carefully applied dry heat. 2. Liquid nourishment combined with a stimulant and a little laudanum by enema. 3. Subcutaneous injection of brandy. 4. Aromatic spirits of ammonia by the mouth. 5. Black coffee and brandy—the stimulant par excellence when it can be retained by the stomach. 6. Quiet; a more than horizontal position; sleep; assurance that all is over and doing well.

Modern surgery has won three great triumphs. 1. It substitutes sleep for pain. 2. It averts secondary hemorrhage by animal ligature. 3. It prevents fermentation by germicidal applications.

4. Can we add a fourth by stilling the nervous system and averting secondary shock?

In opening the discussion, Dr. W. W. Gay, Boston, dwelt upon the importance of preserving animal heat. He is in the habit of using a small dose of morphia hypodermically (1-12 to 1-20) before beginning a capital operation. If the operation is a severe one, the patient is not removed from his bed and is given only a few whiffs of ether to obtund the pain of the first incision.

Dr. C. B. Nancrede, Philadelphia, was in the habit in cases where it was doubtful whether or not the patient had recovered sufficiently to bear an operation, of employing the "ether test." If after the administration of the anæsthetic is commenced, the pulse and the general condition improves, the patient will stand the shock of the operation. If however, the respirations increase in rapidity and the pulse becomes frequent and weak, the ether is removed. These patients never react. Shock is often kept up by a crushed limb. In these cases the condition often rapidly improves when the limb is removed. In order to favor the flow of blood to the head, and to overcome the consequence of its collection in the abdominal vessels he had employed elevation of the limb and the application of the Esmarch bandage.

Dr. Lange, of New York, thought that the influence of loss of blood in the production of shock, was under-rated. He could not recall an instance of prolonged operation in which shock followed provided extreme loss of blood was prevented. In operations where loss of blood is apprehended, he employs large rectal injections of hot water.

Dr. B. A. Watson, of Jersey City, referred to the experiments which he had made showing the influence of ether and of chloroform on temperature.

Dr. David Prince, of Jacksonville, recommended the use of small doses of morphia with tincture of digitalis hypodermically to guard against reflex action and against depression. He considered reflex action an important cause of shock. He also advised that the temperature of the part operated upon should be maintained.

The paper was also discussed by Drs. Weir, Bontecou, Tiffany, Willard, and Moore. Dr. B. A. Watson, Jersey City, moved that a vote of thanks be extended Dr. C. H. Mastin of Mobile for his efforts in introducing and perfecting the plan of organization of the Congress of American Physicians and Surgeons. This motion seconded by Dr. E. M. Moore, of Rochester, and by Dr. Wm. H. Pancoast, of Philadelphia, was unanimously adopted.

After extending to the retiring officers a vote of thanks the Association adjourned to meet in Washington, the second Tuesday of May, 1889.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, September 26, 1888.

The President, J. SOLIS-COHEN, M.D., in the chair.

DR. SAMUEL W. GROSS read the following paper on

The Treatment of Carcinoma of the Breast.

Of operations which do not rank with major procedures, not one is more commonly practised by men not skilled in the manual of surgery than that of the removal of the mammary gland for carcinoma. The superficial situation of the organ, the ease with which hemorrhage is controlled, the flaps are united, and the dressings applied, all tend to make partial or complete extirpation of the breast a tempting field for the young surgeon. If to these considerations be added the great frequency of the disease, it will be seen that its treatment should constitute an instructive topic for consideration and discussion by this body.

In accepting your invitation, Mr. President, to make the opening remarks upon the subject, I take it that a brief narration of my own personal experience will prove to be more interesting than were I to deal with the practice of others, the more especially as the operation which I have performed is more thorough than the usual procedure.

At the outset I will state that in the management of so lethal an affection I have relied upon the scalpel, as I believe it to be the one and only measure which is capable of affording good results. It may be that some of my hearers are sceptical as to the propriety of interference. The old tradition that carcinoma is an outward evidence of a blood disorder, and that it cannot, consequently, be cured by operation, may still influence a few of our members. To these I may be permitted to say, first, that the leading minds of the world now admit that carcinoma is primarily a local growth; and, secondly, as I have elsewhere[1] conclusively shown, from an impartial examination of a large number of cases, that the knife not only prevents the local dissemination of the disease, its extension to the lymphatic glands, and the occurrence of secondary growths in a large percentage of cases, but that it moreover prolongs life, and definitely cures one patient out of every eight and a half.

An operation in a suitable case having been decided upon, the one selected by the majority of surgeons is that with which we are all so familiar, namely, the inclusion of the nipple and a portion of the skin in two elliptical incisions, the reflection of the flaps, and the dissection of the gland from the surrounding tissues. Other surgeons, actuated by the desire to save as much of the gland as possible, limit their efforts to the extirpation of the tumor alone. The first of these procedures is faulty enough; the latter cannot be condemned in too severe terms; and yet, in his recent monograph on "The Operative Surgery of Malignant Disease," Butlin, I am sorry to say, recommends it. A knowledge of the changes which, starting from the tumor itself, ensue in the remainder of the breast, in the adjacent soft tissues, and in the associated lymphatic glands, which changes indicate the local extension of the disease along the lymph paths, ought surely to lead the surgeon to reject such irrational operations. In very exceptional instances a cure may be effected; but we all know what is the common result—a more or less rapid recurrence of the disease; a favorable issue being so uncommon after these incomplete operations that few, if any, of us have ever witnessed it.

Dissatisfaction with my own earlier results and those which I was enabled to follow in the practice of other surgeons led me, ten years ago, to adopt a radical procedure, the object being to effect riddance of all the tissues in which the experience of hundreds of years demonstrates that recurrence, or a new outbreak of the disease, takes place. Hence, in my operation, which is minutely described in the *American Journal of the Medical Sciences* for April, 1888, I amputate, by a circular cut, the entire breast with its overlying skin and fat, dissect off the pectoral fascia, and carry an incision into the axilla, through which I am enabled to extirpate its contents. If nodules should be found in the pectoral or intercostal muscles, they are also removed with an equally unsparing hand. The edges of the wounds are then approximated, the closure of the breast incision being greatly facilitated by raising the flaps from the subjacent tissues for an inch and a half to two inches, and the employment of button sutures. In some cases, the wound cannot be entirely united, so that it has to heal by the process of granulation.

[1] American Journal of the Medical Sciences for April, 1888.

In the discussion which will follow the reading of my paper, I will doubtless be asked, first, Why do you remove the entire breast and its surrounding tissues? and, secondly, Why do you attack the axilla in all cases? My answer is simply because recurrence, or a new outbreak of the disease, ensues in tissues which are left behind in the less radical modes of operating. The accumulated observations of surgeons show that recurrence may be anticipated in the skin and subcutaneous tissues, especially at or near the cicatrice; in the fascia covering the pectoral muscle; in the remnant of the breast from which the tumor alone was excised; in outlying lobules which were overlooked during the performance of the less complete operations, and in the lymphatic glands, especially those of the axilla.

Answering these questions more fully, I would say that sound pathology, as well as experience, demands that the entire mammary gland along with its circumjacent tissues should be amputated; first, because we have to deal with a carcinomatous degeneration commencing at one point, from which the cells migrate in various directions into the remainder of the breast and the surrounding tissues, the extent of which migration into the lymphatics and their radicles it is impossible to determine with the naked eye; secondly, because the disease is sometimes multiple, and the smaller growths are only detected on examining the breast after its removal; thirdly, because minute lobules frequently lie at some distance from the main body of the gland, especially toward the axilla and the clavicle, which may subsequently become the seat of a new outbreak, even as late as ten years, as in a remarkable instance recorded by Banks; and, fourthly, because nodules may be found in the subcutaneous tissues at a relatively great distance from the breast, which would certainly have escaped detection in the lesser operations.

My answer to the second question, Why do you attack the axilla in every case? is because the axillary glands are almost always diseased, even though they cannot be felt prior to operation. Of my 45 cases, the glands were not palpable in 18, but in 15 of these they were present when the axillary space was opened. In 57 out of 65 similar cases, Kuester found that the glands were infected, so that our combined experience demonstrates that the glands are invaded in 86 out of every 100 cases in which there is no external evidence of their implication. Hence, if the axilla is not evacuated of its contents in every case, a subsequent operation will almost surely be demanded. In point of fact, I consider this step as the keynote of the procedure, and I refuse to operate if I am not permitted to have my own way in this regard.

Although the procedure which I have described may appear to be unnecessarily severe as to the sacrifice of tissue, and, at first sight, seem to be attended with more risk than operations performed with a more sparing hand, I have still to present some facts which conclusively show that it is the best that has as yet been practised as regards mortality, freedom from local recurrence, and a final cure.

Of my 45 cases, 2, or 4.44 per cent., perished from the operation, and 5 patients were lost sight of after recovery. Deducting the 7 that died and could not be traced, 38 cases show local recurrence in 11, or 28.95 per cent. Including the deaths, out of 40 cases, 9, or 22.5 per cent., recovered. Of these, 1 died of an intercurrent disease in 7 years and 10 months, while the remainder are still doing well: 1 for 9 years and 10 months; 1 for 9 years and 1 month; 1 for 6 years and 9 months; 1 for 4 years and 3 months; 1 for 3 years and 11 months; 2 for 3 years and 6 months; and 1 for 3 years and 5 days.

Let us contrast these results with those afforded by the next best operation, namely, the removal of the breast by flaps and the evacuation of the contents of the axilla in every case. Of 328 cases of this description in the hands of Banks, Kuester, and von Bergmann, 10.67 per cent. perished, there was local recurrence in 54.92 per cent., and 15.15 per cent. were cured; so that my operation is safer by 6.23 per cent., is less liable to local recurrence by 25.97 per cent., and affords 7.35 per cent. more of permanent recoveries.

It is quite certain that the greater immunity from local reproduction of the disease in my operation is due to the total amputation of the breast, its skin, and enveloping fat. Despite the fact that my results are better than any that have heretofore been recorded, a careful examination of the cases of Banks shows that he met with only 3.88 per cent. more of recurrences than I have, and that his percentage of recoveries, namely, 20.77, is only 1.73 per cent. less than my own. Hence, I felt that I might possibly have sacrificed too much of the skin; and, since June, 1887, I have so far modified my operation in 10 cases, the skin

in none being apparently affected, as to save enough of that structure to admit of nice approximation of the edges of the wound. All recovered from the operation; one died from recurrence in the axilla and metastasis; one is living with axillary reproduction; in not one has there been local reproduction; one patient is free from disease at the end of fifteen months; one for one year; one for nine months; and the remainder for periods varying between three and eight months. These cases can be followed and whenever I am sure of being able to trace my patients, I shall give this procedure a fair trial. When, on the other hand, the patient lives at a great distance, or her circumstances are such as to prevent her visiting me in the event of recurrence, I will adhere to the more extensive operation.

Dr. James Collins, in opening the discussion, said: I have on two or three occasions, in the case of small tumors in comparatively young women, allowed myself to be overruled by the patient and her friends, who urged that it would be a pity to sacrifice so much of the breast as I proposed, to performing a restricted operation; but I have regretted it in every instance, and I can assure Prof. Gross that I will never offend again. That which Dr. Gross describes as the "second-best operation," the large elliptical incision with thorough removal of tissues beneath the skin and exploration of the axilla, is the one I have practiced in the majority of my cases. The prolongation of life in those I have been able to follow would average not quite three years.

The great difficulty we have to contend with in mammary tumors is to secure consent to an early operation. Patients go from surgeon to surgeon, and from city to city, and finally consent to an operation as a last resort or in deference to an authoritative opinion; usually, however, too late to escape recurrence. The recurrence which then takes place, despite skillful operation by a distinguished hand, will be cited in discouragement of timely operation in other cases, by a large circle of relatives and friends.

The exploration of the axilla, which the lecturer in his masterly demonstration has so justly emphasized, should never be omitted. Nor is it too trite a remark to recall that antiseptic methods, which have so improved the results of extended operations, should here also remove any lingering dread of opening up large spaces; for they have improved the outlook of the procedure by assisting the rapidity of healing, and excluding the danger of septic accidents and sequelæ.

Dr. O. H. Allis: I have nothing to add in discussion; I have repeatedly seen Prof. Gross operate, and there is one point in his method of operation to which I would call especial attention. The breast having been covered for twenty-four hours with antiseptic solutions and his hands being thoroughly aseptic, he carefully palpates the pectoral region for outlying nodules, marking the site of any that he finds with a pencil-stroke; and when he operates he does not dissect out these places but includes them well within the sweep of the line of incision. In other words, he cuts beyond the outer limits of the disease.

Dr. John B. Roberts: Dr. Gross has for many years taught us all the proper way to remove a breast, that is, to remove it thoroughly. In my own operations, I have, whenever possible, employed the large elliptical incision; the advantage, and I confess the only one, being that when approximation of the edges of the wound is at all possible, it can by this method be more readily effected. No one who has learned from Prof. Gross the proper way to open the axilla would dare to neglect this portion of the operation. As to aseptic and antiseptic methods, there can be no difference of opinion among experienced operators; they are the only methods permissible in operative surgery. I would like to ask Dr. Gross how long it takes to repair one of the large spaces in what he calls the dinner-plate incision, and what his opinion would be as to the prospects of a plastic operation to aid in hastening healing.

Dr. R. Bruce Burns: Of all surgical cases these are the most unsatisfactory. In my earliest operations I did not open the axilla. Three cases operated on in this way are living for eleven, nine, and five years respectively. Of later years I have opened the axilla, and have been unfortunate. Recurrence has taken place in the cicatrices and even in the axillary tissues, perhaps in small glands not removed. I have thought, perhaps, it recurred in the adipose tissues. I have usually employed the elliptical incision. The method of leaving a large open wound to heal by granulation is rather hazardous. In all cases where I have had to depend upon extensive granulation there has been rapid recurrence and metastasis. There may also be limitation of the movements of the arm from matting of the tissues. It is wise always to attempt to secure union by first intention. It would be well

to attempt to remove outlying nodules in the surrounding tissues. Where nodules occupy a portion of the gland (mammary) and are intimately attached to it, the whole organ should be removed.

Antiseptic measures are only so far useful as, in arranging them, you secure aseptic conditions. I believe thorough cleanliness in all respects, as to instruments, dressings, and the surgeon's hands, with good drainage, is all that is necessary in the treatment of the wounds of operations.

Dr. Gross, in closing the discussion, said: There are many points which might have been touched upon in the paper which I omitted for the sake of brevity. Societies do not like to listen to long papers, and the best speakers teach little in long papers. The points I have tried to emphasize are, the importance of a thorough operation, and the fact that its results are better than those of incomplete operations.

Now as to primary union. Of course, I want to get primary union whenever I can. Those who have never seen my operation would be surprised to see how close an approximation we can get by sliding the bistoury under the skin, say for from one to two inches, and then drawing the loosened flaps together with button sutures. Sometimes when there has been very extensive disease, necessitating correspondingly extensive operation, we have a gap left to granulate of two or three fingers' breadth—never more than three fingers' breadth. Healing may be slow in a debilitated subject with a large wound, but averages about six weeks.

Now as to saving the breast, and only removing the tumor itself—I do not care for the breast. It is of no use. I am concerned in getting rid of all diseased tissues. What surgeon would undertake to remove a sarcoma of the thigh, for example, and for the sake of leaving a little more stump, make his flaps through infiltrated tissue? I should consider such a procedure criminal. Yet it is just what some surgeons want us to do in the breast. In my last ten cases I did, for reasons stated in the paper, the lesser operation; and if I find it equally satisfactory in the end, I will adopt it altogether. I am not wedded to one operation, only so far as not only personal experience but the combined statistics of several operators with good results show that my operation has given the best results.

Dr. Burns has had an experience of coincidences. In the cases in which he did not open the axilla and recovery took place, he had a free axilla. I judge that the doctor thinks recurrence takes place in granulations. Now it is a histological fact that granulation tissue will give rise to granulation tissue alone, and not to epithelial tissue. The granulating surface may be great or small; that has nothing at all to do with recurrence. In those other cases all the disease was not removed, and hence development again took place in the tissues forming the bond of union, or the tissues near the cicatrice.

As to aseptic surgery, I can only say that if anyone has been taught the modern methods and neglects them, and death occurs from erysipelas, pyæmia or septic complication, he cannot be held irresponsible.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, October 4, 1888.

The President, A. Jacobi, M.D., in the chair.

Report of the Delegate to the Congress for the Study of Tuberculosis.

Dr. R. C. M. Page made the report, which had received the verbal approval of Villemin and Landouzy. They had found that true tubercle generally contains the bacillus, which was first supposed to exist by Bouchard, and afterward discovered by Koch. All other substances occurring in non-tuberculous subjects do not contain this bacillus. The bacillus remains virulent in running water at a temperature of 60° F. for six weeks, and in dried sputa for months. It is the cause, not the result of tuberculosis. The disease is contagious under certain conditions, especially in conditions that tend to produce lowered vitality. It is transmitted through cow's milk, beef, etc. In the diagnosis of pulmonary tuberculosis in doubtful cases, the bacillus should be sought for; but it may not be found in the early stage before it has become liberated. As a further test, a lower animal may be inoculated with some of the patient's sputa, and the bacillus be sought for subsequently. No practical means for destroying the bacillus in patients has yet been discovered. Treatment at present is prophylactic—by attention to climate, food, and exercise, and by medicines directed against symptoms as they arise.

The report of the delegate to the British Medical Association was also read.

Dr. E. G. Janeway then read a paper on the

Diagnosis of Diseases of the Liver, and the Fever Accompanying Biliary Obstruction.

Physical examination alone, he said, can not be relied upon in diagnosis of diseases of the liver; the etiology and symptomatology have to be taken into account, and in many cases light will be reflected from the condition of the spleen. It is very easy to make a mistake in estimating the size of the liver. Some, he said, regard tympanitic percussion sound intruding on the space for liver flatness as an absolute sign of perforation of the bowel; but he himself had found this to be due in some cases to the existence of a portion of intestine between the liver and diaphragm, and in others to the liver being turned up by a tumified condition of the abdomen. Adhesion of the liver to the diaphragm from perihepatitis may also prevent tympanitic percussion sound from replacing liver flatness in intestinal perforation. We must take into consideration, he said, in studying diseases of the liver, the condition of the heart, lungs, abdominal viscera, and especially of the kidney. An enlarged right kidney may, in one instance, make the liver appear too small, and in another too large, according as it displaces the liver forward and downward or upward and backward. Aneurism and tumors behind the liver have been known to push the organ forward, making it appear large. The intestine or omentum may become adherent to the liver and make it appear enlarged.

Livers were classified according to size in different diseases, but he mentioned cases in which, in the same disease, the liver was in one instance small and in others large, including, of course, cases of cirrhosis. Dr. Janeway regarded nodulation as an important aid in diagnosis in cancer and cirrhosis; but the liver sometimes appears large and smooth because of distribution. He divided livers up into smooth large livers and large nodular livers, and said that here one must rely on other than physical signs in determining the disease present. Illustrations were given in cirrhosis, waxy liver, and infiltrating cancer. He then took up small livers, and said that moderate diminution in size is often difficult to determine.

Aid in diagnosis, he said, is obtained from jaundice; but here also there is liability to error; for a diseased process surrounding the ducts is more likely to cause jaundice. A limited process may cause it, if it is favorably situated, although jaundice may not be present in a large process. Jaundice is frequently absent in solitary abscess and present in multiple abscess. A case was cited showing that obstruction of the bile-duct is not absolutely necessary to cause complete absence of bile from the feces.

Dr. Janeway then took up

Fever and Jaundice.

Fever, he said, is sometimes present in cancer of the liver, showing that inflammatory process is not absolutely necessary for the production of fever. The fever may be due to an intercurrent process. We were liable, he said, to be deceived by Weil's disease, the nature of which is not yet thoroughly understood. The intermittent hepatic fever of Charcot, which occurs in connection with obstruction of the bile-ducts, may be mistaken for malarial fever. Exploratory puncture has not done harm, but is not sure to reveal abscess when it is present. It should be made deep and in the axillary region, or behind into the right lobe. Perihepatic friction is an aid in pointing to the proper place in which to make puncture.

Dr. A. L. Loomis, replying to a question by the President, said he had not known fever to be absent in multiple abscess, but it is frequently absent in single abscess of the liver; further, in his experience, single abscess of the left lobe is very rare. In this last remark the President agreed, whereas Dr. Janeway had found solitary abscess to be situated in the left lobe as compared with the right lobe in about one-third or one-fourth of the cases. The President said that some observers held that the liver was enlarged in rachitic children, while others denied this. A liability to mistake consists in the fact that the liver in young people is normally large; further, that in rachitics the arteries are large as compared with the heart, and the blood pressure low, and consequently the liver would appear large from mechanical stasis. Again, the deformity of the chest pushes the liver downward and forward, making it appear large. He asked if hematemesis early in cirrhosis might be followed by appreciable diminution in the size of the liver, which early in the disease is large.

Dr. Loomis thought he had seen this result.

Special Correspondence.

LETTER FROM AUSTRALIA.

Melbourne, Sept. 1, 1888.

Sanitary Condition of Melbourne.

The rush and excitement connected with the early days of the great Centennial International Exhibition having subsided, I can now devote some time to jotting down the medical notes taken here and there since my arrival. Melbourne is an active handsome city, with a certain American air. It has broad well-paved streets, with no cobble-stones, so that the drive-way is one broad sheet of lovely smoothness. It is a luxury to ride here. What a comfort to the driving doctor! What a comfort to sick rooms next to streets! Melbourne on its surface is fair as a rose; it blooms with delight. But the comparison stops here; for its odor is worse than all the stinks of Cologne. The stench is that of a rotton, polluted, undrained city—a city teeming with four hundred thousand people, and not a drain, save one in Collons Street and one in Bourke Street. These have been recently laid, and are only for surface water. So-called earth closets are used; but as nine-tenths of them have no earth supplied to them, the sewage system is practically a mere pan receptacle, and is emptied only once a week. It requires a cigar, perfumery, and curses upon such a system to make one's morning visitation to the closet endurable. The people are being taught the danger of this system by the efforts of the Melbourne Health Society; by the visitations of epidemics of typhoid fever; by the fearful death rate among children, high consumption mortality, and by the general high death rate. Now I do not write this in the spirit of captious criticism; it is not hastily spoken. I refer to the reports of the medical men themselves, and among the latter to the Health Officer of the city.

The general death rate of the colony of Victoria is 13.24 per 1000; that of Melbourne 23 per 1000. Consumption gives the high rate of 23.81 for every 10,000 persons living in Melbourne; while Victoria's rate is only 8.91 in the same number of inhabitants. This cannot be explained by the number of deaths in hospitals, nor by the aggregation of population, for the city has a large area, and is not densely populated as compared with the cities of the Old World; nor by unhealthy occupations, as the laboring classes are in a good general condition. They get good wages with short hours, the eight-hour system being in vogue. I think the statements of the Health Officer cover the point, and enforce the lesson now so well known by the medical fraternity—the relation of dampness to consumption and of filth to all zymotic diseases. He says: "In this large and growing city we are yet very much in the condition, as regards drainage facilities, in which we were placed by nature—perhaps a little worse. We have gone on, year after year, saturating the soil with all sorts of stinking abominations, and keeping it constantly soaked with the water from our Yanyean reservoir, and it is impossible that we should not suffer from the damp and foulness so engendered." He is quite sure that the excessive death rate from consumption is owing to the bad drainage. He further states that water pumped from cellars is found to be the rankest compound of the villainous smell that ever offended the nostril; and moreover, this bilge water or sewage is so foul that its contact would pollute the purer water in the gutters, so the law insists that it must be deodorized before it can be pumped out from the cellars into the streets. Melbourne can furnish a warning text for sanitary lecturers. Typhoid fever has been very prevalent here for two years, and sanitarians are directing attention to the need for sanitary improvements. It is unfortunate that the first city of Australia should not lead in these matters; but visitors to Adelaide have been struck with the great improvement effected by the adoption there of a system of deep drainage with utilization of the sewage for agricultural purposes. Not only is there comfort from the increased cleanliness and freedom from smells, but the death rate has been considerably lowered and the citizens appear to be unanimous in opinion that the money required has been well spent. It is the feeling of the Victorian doctors that if the bill for establishing a metropolitan board of works can be carried through Parliament this year, a beginning will be made without delay in the works of drainage.

Australian Health Society.

The Australian Health Society has been in existence twelve years. The objects of the Society are: (1) to create and educate public opinion with regard to sanitary matters in general, by the aid of the platform, the press, and other suitable means; (2) to induce and assist people, by personal influence, example and encouragement to live

in accordance with recognized laws, whereby health is maintained and disease prevented; (3) to seek the removal of all noxious influences deleterious to the public health, and to influence and facilitate legislation in that direction. It is sustained by members who pay five shillings a year. An interesting feature is the meetings for wives and daughters. A series of lectures are given by women, the topics being in the usual orthodox line—circulation and respiration; digestion; the skin; cleanliness; nursing the sick; cooking; dress; accidents, etc. The Society has a large and well patronized library, free to the members of the Society.

I have spoken of the filth question of this city. I find there is a great hue and cry just now of dirt in another direction—the frightful condition of the abattoirs. The accounts published of these are sickening reading. The authorities are at last rousing themselves; a Royal Sanitary Commission has been appointed to enquire into the sanitary condition of the city and its many suburbs; it held its first meeting a few days ago. During the progress of the meeting a Mr. Service, who has been much abroad and looked into these matters, was called upon to "give in his experience." According to this man, the best abattoirs are found in Germany, the worst in Chicago. He said that in Berlin and Munich the abattoirs are kept so clean and tidy that any person could sleep on the premises without experiencing any discomfort. The yards are all carefully paved in order to prevent the retention of any offensive matter, and the method of drainage is perfection. In Berlin they go so far as to practice the æsthetic by the growth of flowering creepers against the wall. He caused much laughter over his description of the Chicago "pork mill." He said that while in the United States, he accompanied a party of men and women on a visit to large abattoirs and a manufacturing establishment in Chicago. It was utterly impossible to approach the yards on foot, the approaches being of the most filthy character, and the yards were in the most unsatisfactory condition; it was one of those institutions in which a pig went in alive at one end and came out tinned pork at the other. Such was the condition of things about the establishment that the women in the party said they would not eat tinned meat again. The question was asked him how they treated the blood at the German abattoirs. This he did not remember, though he saw its importance, as the German sausage is essentially a blood sausage; but he said that after what he had seen at Munich and Berlin he was not afraid to eat anything German. The commission is now taking into consideration the advisability of sending an expert to Germany to critically examine the system in that country.

The comments on the new method of killing criminals by electricity, as sanctioned by the State of New York, have brought out a number of "leaders" in the daily papers of the colonies. The general expression is in favor of the plan. After a very elaborate dissertation upon the subject, the *Argus* says that example does not terrify, and that the gallows conveys no warning to those who live. In fact, it goes so far as to say that the death sentence should not be used too freely; that it can lose its admonishing effect from the very frequency of the spectacle. It concludes that death in the electric chair may be less painful than death on the scaffold, but it means the same for the criminal, and in the absence of any scientific proof to the contrary will continue to mean the same.

New Zealand Doctors.

We are hearing much on all hands just now concerning the great financial depression in New Zealand. At the late Medical Conference held in Auckland, it was found that the doctors are feeling greatly the pinch of the hard times. It was brought out in the meeting that the profession has been affected by a combination of causes; the season has been a healthful one; the people are economizing, and let their trifling ailments go without calling the doctor; then again the old story the world round—there are too many physicians. A rough census taken during the session shows that there are 26 doctors in Dunedin, 22 in Christ Church, 13 in Wellington, 35 in Auckland, besides a number here and there in the country districts. It was the opinion of the Conference that this is too large a proportion of physicians for a healthful climate like New Zealand. How much akin are the tribulations of our profession; some patients can not pay, others will not. How familiar the story sounds that a New Zealand doctor told me: he handed in a bill to a family for twenty-five dollars; he was induced to take fifteen by reason of the stringency of the times. To his disgust, in a few days he learned that the same family had bought a new and expensive piano. The world is wonderfully alike, whether under Ursa Major or under the Southern Cross.

Medical Practitioners Statute.

The medical profession in Australia is regulated by the Medical Practitioners Statute. This authorizes the appointment of a central board of health, which has control of compulsory vaccination; of quarantine; the sanitorium for contagious diseases; the vaccine lymph farm, and all the affairs of sanitation. In justice to this board, after we know what a lamentable condition the drainage is in, it should be said that their powers are greatly hindered by other branches of the government; but a bill is before the House now to increase their powers. The council of each city, town and shire constitutes a local board of health, and all are in close correspondence with the central board. The board annually expends about $75,000, inclusive of about $30,000 in obtaining and keeping up the vaccination of the people. About 85 per cent. of the population are vaccinated, and there are 150 public vaccinators. Rather a unique, but certainly a good power invested in this board, is a supervision of the theatres and places of amusement; the Government refuses the license to such places as are reported unsafe by this body.

The Medical Board consists of three of the medical profession, appointed by the Governor, removable at pleasure. The Board registers the name and addresses of all who are legally qualified to practice. It is proposed to empower the Board, by legislation, to erase from the Register the name of any practitioner guilty of felony or misdemeanor, or for unprofessional conduct. The qualifications for being placed on the Register are: a diploma from any of the colleges of standing in the United Kingdom; of any Colonial college, and any diploma which proves that the holder has passed a regular course of medical study *of not less than three years duration;* the applicant must be native-born or a naturalized citizen. The British Pharmacopœia is the only one recognized. There is also a very stringent Pharmacy law.

The duty of the police medical board is to examine such members of the force as may be sent before it. A strict professional examination is made of each person sent before the board. Upon the Board's report the Police Superannuation Board are guided in their determination whether the applicants are entitled to retire from the force. This makes this body an important one; cases of malingering must be decided, and heavy payments from the public money rest upon its opinion.

There is a medical society in each colony, also an intercolonial one, as well as a branch of the British Medical Association. The Victorian authorities present the curious anomaly of permitting the city at large to be in the most disgraceful condition of filthiness, and yet prosecuting one of its citizens for keeping his premises in an unclean condition. At the Fitzroy court, on Monday last, a butcher was fined forty shillings for keeping on his premises fat and offal in an advanced condition of decomposition; and a dairy man, in the same district, was fined $30 for allowing a manure bin to overflow and for the accumulation of refuse matter at the very door of the place where the milk was laid in pans to "cream." The judge gave him, besides, a stern lecture upon the danger to the community at large of allowing his dairy to fall into such a filthy condition. It is easy to preach, but oh how hard to practice! How any court could have the—well, the brass to fine and lecture an individual in this town is astounding, when the city itself furnishes no example, or in fact any means, for a man to be clean if he so desired.

C. C. Vanderbeck, M.D.

Foreign Correspondence.

LETTER FROM BERLIN.

(from our special correspondent.)

The Royal Charité being the great clinical centre of the German Empire, the yearly publication of the *Charité Annalen* is always looked for with considerable interest in this country. The latest issue, which has just been published, contains so much interesting and valuable information that the readers of the Reporter will no doubt welcome some brief extracts from it. The number of patients treated in the hospital within a year was 19,634; of this number 1893 died, while 14,963 were discharged as either cured or improved. Variola, typhus exanthematicus and recurrent fever did not occur at all; diphtheria, scarlet and typhoid fevers were less frequent, but measles and erysipelas more frequent than in the preceding year. It is a singular fact that delirium tremens was found to be constantly increasing, this increase amounting to not less than 50 per cent. since 1877.

Prof. Leyden, in this volume, discusses four cases pertaining to localization of the cortex cerebri. The first patient, a healthy coachman, was suddenly seized with a right-

sided hemiplegia and total aphasia following over-work, mental excitement and a cold. After convalescence symptoms of a typical Jacksonian epilepsy appeared, simultaneously with right-sided anæsthesia. Death ensued in coma. The autopsy revealed infiltration of the external, and also lesions of the internal capsule. In two other cases there was fracture of the petrous portion of the temporal bone, with left-sided intrameningeal hemorrhage. One patient died, the other recovered. The fourth patient, a syphilitic man, fainted suddenly, and, when he came to, showed aphasia. He was cured, the diagnosis of the case being a gumma of the cortex.

Of more general interest are Professor Fränkel's *bacterioscopic examinations of purulent pleuritic exsudations*, and the diagnostic deductions to which they lead. We reproduce here only the salient points. In a sero-fibrinous pleuritis micro-organisms are not found frequently. If streptococci are present, the formation of empyema is to be looked for, or is already in existence and its pus cells have settled. In empyema, which, of course, can also appear primarily, we find micro-organisms of a most divers nature. Of these, the streptococci and staphylococci are devoid of diagnostic significance. If, however, pneumococci are found exclusively, we have to deal with pleuritis resulting from pneumonia.

Again, if no micro-organisms are found at all, we have to suspect tuberculosis. The tubercular element consists here only in spores, while the tubercle bacilli are but few in number and therefore hard to find.

Professor Brieger communicates a rare *case of tachycardia* with paralysis of the pneumogastric nerve. The patient, a woman 33 years of age, who had borne eleven children, had been a sufferer since her ninth year with dyspnœa and palpitation of the heart. Death resulted from an intercurrent pneumonia. Her pulse registered the enormous number of 250 beats a minute. The diagnosis of paralysis of the pneumogastric nerve was strengthened by the singular fact, that compression of that nerve temporarily aborted the paroxysms.

Professor Fräntzel has contributed an interesting little paper on the *conditions contra-indicating* the *opening of empyemas*. These contra-indications are chiefly the following: 1. When tuberculosis exists simultaneously. 2. When without concomitant phthisis the thorax is rigid and inelastic, and the lung of the affected side remains absolutely inexpansive; as in these cases a perfect healing of the wound cannot be looked for. 3. When we have to deal with an empyema unaccompanied with fever, especially in persons of advanced age. In these cases an operation is more injurious than helpful.

The communications of Professor Bardeleben, the Nestor of German Surgeons (Billroth being an Austrian, Langenbeck no longer living, and Bergmann being a much younger man) invite our attention by the very name of their author. Bardeleben has given special attention to the question of the *most eligible surgical antiseptics*, and is very emphatic in giving iodoform the foremost place. He uses a solution of iodoform in ether and alcohol (one or two parts in eight) for injections and for applications to fistulæ, to carious foci, and for the preparation of iodoform gauze. As a new dressing material, Bardeleben recommends moss paste-board saturated with a 1 to 1000 solution of corrosive sublimate, which is advocated by Hagedorn. The chief advantages of this innovation are cheapness, great absorbent power, and capacity to immobilize a part. Bardeleben's method of preserving cat-gut antiseptically is as follows: The cat-gut is placed for a few days in a five per cent. solution of carbolic acid, then into alcohol, and shortly before being used into a one per cent. solution of corrosive sublimate. For sewing bone Bardeleben uses the aluminium-bronze wire, which was introduced first by Professor Sauer. This substance is both elastic and durable

Of interest also is the report of a death following upon the inhalation of six fluid drachms of chloroform. The patient had a number of lipomata removed, and it is questionable if the anæsthetic caused the result, or if it was an example of one of those sudden deaths in lipomatosis of which Dr. Risch treated in detail some time ago. Throughout the whole of Germany chloroform is the only anæsthetic used, and accidents appear to be of less frequent occurrence with its use than with the use of ether.

Dr. Sommer makes some instructive suggesitons regarding the use of *corrosive sublimate in obstetrical practice*. He believes that the bichloride of mercury is by far the most eligible antiseptic agent for the obstetrician both as regards efficacy and safety. He urges, however, two restrictions to its use, which ought to be borne in mind: viz., not to employ the drug unnecessarily, and to apply it only in great dilution. Sommer advocates dilutions of 1 to 5000 and even of 1 to 8000. Post-partum injections of bichloride into

the uterine cavity should be employed, he says, only: first, after infra-uterine operative interferences; second, after expulsion of macerated fœtal products; third, when there has been fever before parturition; fourth, in atonic hemorrhages. Symptoms of slight and rapidly disappearing poisoning were observed only in four of all the cases treated in a year's time in the Charité. The use of corrosive sublimate during confinement Dr. Sommer restricts to cases with a quick pulse and temperature over 102.2° F; to cases in which there are bad smelling lochia and a sensitive abdomen; and in cases in which there are late hemorrhages.

Professor Brieger has examined pus taken from seven women who died of *puerperal fever*, and found in cultures made from this pus both streptococci and staphylococci, which, transferred to animals, remained wholly inert. He therefore concludes that the fatal issue of the malady does not depend upon these micro-organisms, but upon some other poisonous substances which are generated in the organism. The same author relates the clinical history of a woman which suggests a relation between the hemorrhagic diathesis and pregnancy. The woman in question, 39 years of age, who had borne three children, showed during her fourth confinement hemorrhages from the nose, gums, and lower extremities, hematuria and bloody stools. Shortly after confinement the woman died, without any previous hemorrhages. This, Professor Brieger thinks, appears to point to a possible relation existing between the diathesis and confinement; though regarding the nature of this relation, no definite deductions can as yet be made.

Professor Gerhardt, Dean of the University of Berlin, has enriched the *Charité Annalen* with a study on the *engorgement of the spleen in pneumonia*. He examined twenty-five cases for the above purpose, and found that in seven cases there was no swelling of the spleen; in six the engorgement was noticeable only in the early phases of the affection, while in ten cases the splenic tumefaction lasted throughout the course of the fever. The important point of the study is, of course, Gerhardt's conclusion regarding the pathogenesis of this symptom. He believes that the actual cause of the engorgement of the spleen in pneumonia does not depend upon febrile processes, nor upon micro-organisms, but upon an aggregation of broken down red and white blood-cells in the spleen—a view that is confirmed by certain other appearances in the affection, such as peptonuria and grass-green stools.

Professor Gerhardt furnishes also some interesting notes on a very rare affection—*lightning-stroke*. The patients in question suffered from various forms of nerve irritation. Noticeable were the so-called "lightning figures," *i. e.*, sensations as if electric discharges were continually going on before them. Another singular symptom appearing in this affection was jaundice, caused, in all probability, by the deposit of the coloring matter of the blood in connection with electric influences. Anæsthesia was also noticeable.

Dr. Müller presents two rare cases of *disease of the stomach*—dilatation of the stomach, and hour-glass constriction with alteration of the axis. In both cases there were violent tetanic paroxysms. Tetanus, he says, is one of the most dreaded complications of affections of the stomach, the mortality in such cases being as high as 62.5 per cent. Its etiology has not yet been satisfactorily established. Tetanus in gastric disease has been thought to be due to a desiccation of the tissues, similar to the cramp in the peroneal muscles which occurs in cholera. Another view is that the tetanus is caused by poisoning with ptomaines, generated in the stomach. The author himself regards it as a reflex symptom.

Professor Ehrlich communicates the clinical history of a case of *pernicious anæmia*, in which the pernicious nature of the disease was established during life through examination of the blood. The cause was an injury. The red blood cells were found to be enormously decreased, only numbering 213,000 per cubic millimetre. The leucocytes were reduced in the same proportion, and those formed in bone-marrow were absent altogether. This led to the diagnosis of a grave bone-affection—a view subsequently confirmed by the autopsy, which showed the marrow of the femur to be colorless.

—New cases of yellow fever continue to be reported at Jacksonville, Fla., but are fewer in numbers and not so fatal. The quarantine was raised at Jackson, Mississippi, October 12, and many refugees returned to the city.

—In a paper read before the American Association of Obstetricians and Gynecologists, Sept. 18, 1888 (*American Journal of Obstetrics*, October, 1888), Dr. W. W. Potter reported a case in which he had performed double ovariotomy in a pregnant woman. The patient subsequently went to full term and was delivered of a living child.

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DR. MACKENZIE'S BOOK.

The unfortunate discussions in regard to the treatment of the Crown Prince, and afterward Emperor, Frederick of Germany during his last illness have culminated in the formal presentation by Sir Morell Mackenzie of his side of the controversy. This presentation comes in the shape of a book called: "The Fatal Illness of Frederick the Noble," in which the author endeavors to show that he was altogether right in his management of the case, and those who differed with him were altogether wrong.

It is not strange that Dr. Mackenzie felt the dissent and distrust of his German associates, while his patient lived, or was irritated at their triumph when the diagnosis which they made and he denied was confirmed, and when the false hopes with which he inspired the victim gave place to despair and death. It would not have been improper if he had, in some brief communication to his professional brethren, explained the reasons why he so long and so stoutly maintained that the Crown Prince was not suffering with cancer of the larynx, and refused his assent to the extirpation of the growth. In doing this he might even, without incurring much censure, have answered some of the charges and insinuations against him which he attributed to the envy of German medical men. But, unfortunately for his reputation, he has passed beyond the limits to which a discreet man, conscious of being right and confident of the respect of his professional brethren, would have restricted himself, and has put before the world a statement which will do him more damage than anything which others have stated of him.

We need not now undertake the work of exposing the fatal inconsistencies of Dr. Mackenzie's argument that Gerhardt converted a benign growth in the Crown Prince's larynx into a malignant one, and that Bergmann finally killed him. For our present purpose it is enough to express our condemnation of the spirit which prompted these shameful accusations and our contempt for his undisguised intention to make money out of them.

For the good of our profession, we trust that this book will find no apologists in any civilized land, and that medical men everywhere will do what they can to lessen the disgrace it is likely to bring upon us all by utterly repudiating it. A more stupendous example of the folly to which hatred, malignity, and avarice may drive a man could hardly be imagined; and the responsibility for it may well rest alone upon the individual who was capable of perpetrating it.

THE AIR OF THE BED-ROOM.

The season is now at hand when the problem of ventilation is most important and most difficult of solution. Cold outside, and attempts to maintain a warm temperature inside our houses combine to make living

dangerous to all but the most robust constitutions; and it is not easy to arrange matters so that comfort and safety to health shall go hand in hand. This is especially true in regard to the management of the air in bed-rooms.

There are those who still cling to the idea, which no intelligent medical man now holds, that a cold bed-room is a promoter of health and vigor. Recent studies of the conditions which favor the production of diseases of the lungs leave no doubt that sleeping in a cold room is a most dangerous practice. There are those who can stand it; but it is only because they have unusual powers of resistance. The great mass of mankind, old and young, need to have their bodily temperature carefully maintained at night, and the air they then breathe at about the same temperature as that of the air they breathe by day. Indeed, if there is any difference, it should be that the air which surrounds them when they sleep is somewhat warmer than that in which they move about by day.

For many years those who taught hygiene in popular treatises argued from certain assumptions which had an appearance of soundness, but which were actually unsound, and directly contrary to experience. The fear of what was called foul air led them to underrate the dangers of cold air; and in attempting to escape the former they ran right into the latter. It is strange that these well-meaning teachers failed to see the contradiction to their theories which is furnished by the inhabitants of very cold regions, and that they did not ask themselves why men, and women, and children, who spent the day in the pure and cold air of the Arctic regions and the night in the hot and close atmosphere of their huts, were exceptionally free from diseases of the lungs.

In our day the lesson this fact teaches is better understood, and we know that draughts and a chilly atmosphere in the so-called temperate regions are more dangerous to life and health than foul air seems to be in the frigid zones.

All this is not intended as a defense of foul air; but rather as a warning against cold air. And, those who give advice as physicians may bear it in mind when consulted in regard to the management of living rooms and sleeping rooms in our cold winters. For bed-rooms especially, they may without fear of error recommend a temperature which shall not put any strain upon immature or frail constitutions, and warn their patients against any system of ventilation which involves a cold bed-room.

Bed-rooms should not be over-heated, but they should never be under-heated. A temperature of about 60° is probably a safe one for sleeping apartments. Ventilation should never be secured by means of open windows, but rather by partly opened doors, with precautions to prevent a draught across a bed, or a current of air from a room in which there is any known source of contamination. If a fresher air is desired than many houses have at about the usual hour for retiring, it may be secured by freely ventilating the sleeping-rooms shortly before they are to be occupied, and the rest of the house for a few minutes before the last member of the family goes to bed.

The details of this method can easily be worked out by any intelligent man or woman, and we believe it will furnish a trustworthy means of securing a safe atmosphere as well as a comfortable one.

The matter is so important that we would gladly devote more space to its consideration; but we must leave it here to the consideration of our readers.

TRANSPLANTATION OF SKIN FROM A CORPSE.

In the department for correspondence of this number of the REPORTER will be found a letter on Skin-Grafting, written by that well-known Surgeon, Dr. R. J. Levis. In this letter Dr. Levis expresses his disapproval of the plan of transplanting skin from a corpse

which was described, with favorable comment, in an editorial in the REPORTER, September 22. We have no hesitation in publishing Dr. Levis's criticism of the editorial referred to, because, while we regard honesty of purpose and fair intelligence as essential to the proper discharge of editorial duties, we do not think infallibility is indispensable in an editor. For this reason we shall not fear, if occasion arises, to acknowledge an error or be slow in retracting it. In the present case, it is quite possible that Dr. Levis is right, and that we are wrong; but we cannot see that he has demonstrated the soundness of his position or the error of ours. The only objection he raises, in his letter, against the use of any skin but that of the patient, for skin-grafting, is founded upon a fear which has never, so far as we know, been realized in practice, and which we believe never would be realized if proper precautions were observed in selecting the subject from which the grafts were to be obtained.

In discussing this matter, it must be borne in mind that we speak of exceptional cases. There are very few in which the patient cannot supply the needed grafts. In that of Dr. Bartens, which we referred to in our editorial of September 22, the surgeon may have been wrong in thinking the patient's skin unfit for the purpose. But, if this were the case, it would not affect the general question, and we still believe that, in a case in which skin grafting was necessary, and the grafts could not be obtained from the patient or a healthy donor, it would be good surgery to take them—with precautions similar to those necessary in selecting a living donor—from a corpse.

—Dr. E. Williams, of Cincinnati, Ohio, died in that city recently of an organic disease of the brain, from which he had been a sufferer for about two years.

—Dr. Albert E. Persons has been elected Professor of Materia Medica and Therapeutics in Niagara University, in place of Dr. F. R. Campbell, who recently died.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

A MANUAL FOR HOSPITAL NURSES AND OTHERS ENGAGED IN ATTENDING ON THE SICK. By EDWARD J. DOMVILLE, L.R.C.P., Lond., M.R.C.S., Eng., etc. Sixth edition. Small 8vo, pp. 100. Philadelphia: P. Blakiston, Son & Co., 1888. Price, 75 cents.

This is an admirable little book which might well be in the hands of every nurse, who is such by profession or under the stress of circumstances. Its instructions are perfectly clear and sensible, and with few exceptions are entirely trustworthy. As an exception we note the advice given in regard to the administration of enemata. The author says the tube of the syringe should be passed "through the anus for about four or five inches along the bowel in a direction first backward and then a little forward." In this there are two errors: four or five inches is a greater distance than is necessary; and the tube should be directed first forward, until the sphincter is passed, and then backward along the lower part of the curve of the coccyx and sacrum. We observe also certain Anglicisms in the book, which might need to be translated on this side of the Atlantic; but, on the whole, we have nothing but praise for this excellent manual.

PAMPHLET NOTICES.

[Any reader of the REPORTER who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

THE HISTORY OF ABDOMINAL SECTION IN ALBANY, WITH A REPORT OF SEVENTY-FIVE CASES. By ALBERT VANDER VEER, M.D., Albany. From the *Transactions of the Medical Society of the State of New York*, 1888. 35 pages.

INTESTINAL OBSTRUCTION. WHEN SHOULD OPERATIVE MEASURES BE RESORTED TO IN INTESTINAL OBSTRUCTION? By ALBERT VANDER VEER, M.D., Albany, N. Y. 4 pages.

—Fifty-one of the operations reported in Dr. Vander Veer's paper were done by him and twenty-four by other operators in Albany. The pamphlet contains an extremely interesting account of the progress of abdominal section in that part of the country from the time of its tentative and dangerous beginnings to the present period of confidence and safety. As a whole it is a valuable contribution to the history of this operation, and what has been accomplished in Albany, taken with what is happening every day in other parts of the United States, seems to justify the statement of Dr. Vander Veer: "As America is first in much that pertains to progress in science and art, I am convinced that she will soon lead in the practice of abdominal surgery."

—In the discussion on intestinal obstruction at the last meeting of the Medical Society of the State of New York, Dr. Vander Veer gave the opinions contained in the four pages of this leaflet as to the time when medical treatment should be abandoned and operative treatment be instituted. The gist of them is that delay must be limited, and that an operation should be undertaken before shock and collapse appear.

CORRESPONDENCE.

Status of American Medical Schools in Europe.

To the Editor.

Sir: Yours of the 18th ultimo was duly received, but owing to my being absent in the South looking after Yellow Fever, I could not reply sooner.

Practically, the diplomas of no medical colleges are recognized in Europe. If the question was divided it could be answered much easier. As, for instance, the recognition of diplomas for the purpose of practice, or as a qualification prior to receiving degrees from institutions. Degrees of Harvard, University of Pennsylvania and Bellevue, receive recognition to a certain extent in some countries, but not in all. By a recent Act of Parliament, the Medical Registration Law of Great Britain has been changed, allowing the registration of diplomas from other countries. I am not advised as yet whether the law has gone into effect, or what diplomas are recognized. Am sorry I do not have time to look up the latter question more closely at present. If you have the files of the London *Lancet* during the past year you can ascertain the details with regard to the Act.

Yours truly,

John H. Rauch,

Secretary Illinois State Board of Health.

Springfield, Illinois,
October 4, 1888.

[This letter is an authoritative reply to a question asked by one of our subscribers. Editor.]

Skin Grafting.

To the Editor.

Sir: To an observer of the literature of the progress of practical surgery it is curious to see how frequently old, discarded practices are revived and proclaimed as novelties. Your recent editorial on "Transplantation of Skin From a Corpse" is a marked illustration of such a useless resurrection of a long defunct subject.

Many years ago, soon after the success of the process of skin grafting was announced, I tried grafting from the integument of recently amputated limbs, and also from the cadaver. The success of these grafts was quite equal to that from the living subject. But I soon discontinued the practice of grafting from the cadaver and from amputated limbs, and from any source but the patients' own integument, and publicly deprecated and condemned it as subjecting the patient to serious risks of specific infection.

You need not be troubled by the fear that the recent revival of this improper operation by a German surgeon "is likely to imperil the claim of our country for having originated it." I believe that I was the first who experimentally performed it, but would prefer to make the claim of having been the first to discard and condemn it.

I have successfully transplanted the skin of a rabbit to a raw surface that was denuded in a plastic operation on the face. In a noted case of cicatricial deformity of the face I successfully formed an entire upper eyelid from the integument of an anchylosed and useless finger that I had previously amputated from the patient's own hand.

I send to you herewith a copy of my pamphlet on skin grafting, which was originally published in the *Philadelphia Medical Times* about twelve years ago.

Yours truly,

Richard J. Levis, M.D.

Philadelphia,
September 25, 1888.

[See editorial columns.—Ed. Reporter.]

NEWS.

—Dr. Parvin has removed his residence to 1626 Spruce St., Philadelphia.

—Dr. Josef Fabricius, Professor of Ophthalmology in Buda-Pesth, died recently. He was fifty-three years old.

—Dr. Henry Rolando, formerly of Baltimore, Md., died October 4. He had been practising medicine in New York City for the past two years.

—Dr. Joseph Warrington died in Moorestown, N. J., October 12, at the age of 83 years. He was graduated from Jefferson Medical College in 1828.

—We regret to hear that Dr. Von Esmarch, the distinguished Professor of Surgery at the University of Kiel, is seriously ill in New York City.

—Dr. H. C. H. Herold, of Newark, N. J., has traced the cause of a number of cases of lead poisoning to soda water put up in bottles having a patent cap which contained lead.

—Dr. Paul Gibier, who was instructed by the French Government to visit the United States for the purpose of studying yellow fever, arrived in New York October 15. It is his intention to go to Jacksonville.

THE

MEDICAL AND SURGICAL REPORTER

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Clinical Lecture.

TWO CASES OF ABDOMINAL CANCER.[1]

BY PROFESSOR S. JACCOUD,
PARIS, FRANCE.

Gentlemen: The study of two patients now present in our wards will enable me to direct your attention to the double obligation which the diagnosis of abdominal cancers entails, and to the great difficulties attending such diagnosis. The double obligation which I assign to the diagnosis belongs to all tumors: it is necessary to determine the *seat—topographic diagnosis;* and it is equally necessary to indicate the *nature—nosologic diagnosis.* The application, then, of this principle to abdominal cancers is but a particular case of a general rule; but it is perhaps in cancers of the abdomen that this application meets with the greatest difficulties.

It may happen that in the same patient the two parts of the diagnosis are equally easy or equally obscure; and it may also happen that one of the parts of the diagnosis is evident, while the other is entangled in very serious difficulties. This is the case with our two patients; in one of them, the patient who occupies No. 7 of Ward Jenner, the topographic diagnosis is so plain that there is little chance for mistake, while the nosological diagnosis remains almost doubtful; on the other hand, in the patient who occupies No. 28 of the same ward, the nosological diagnosis can be affirmed at first sight, while the topographic diagnosis continues to be obscure, if not uncertain.

[1] Delivered in the Hôpital Pitié, Paris, France.

Let us now enter into the detail of the facts. Our patient of No. 7 is a man 58 years old, a currier by occupation, who entered the hospital June 22, twelve days ago, because he had been for some time suffering with pains in the abdomen. He says, moreover, that he has grown somewhat thin, but does not complain of any alteration in his general health; the appetite is good, the digestion perfect, there is neither diarrhœa nor constipation. It is possible that he may have lost flesh, but he is still in sufficiently good condition; his features are animated, he is rather florid in the face, and there is nothing in this man to awaken the idea of a grave affection, much less of a cachectic disease. Proceeding to the examination of the abdomen to find the cause of the pains from which he is suffering, I detect at once by the sight, before making any palpation, a large swelling occupying all the region above the umbilicus, extending from one hypochondrium to the other. In the vertical direction the abnormal protuberance is seen to reach from the point of the xiphoid appendix to a finger's breadth above the umbilicus; there a deep fissure clearly separates it from the inferior region of the abdomen. This voluminous tumor strictly follows the respiratory movements, moving in its entirety during both inspiration and expiration, thus conforming itself to the rise and fall of the diaphragm.

Already to simple inspection this swelling, by reason of its volume and its configuration, gives the idea of a hard production; and, in fact, on palpation, the tumor is found to be everywhere of a compact hardness, this induration being almost uniform at all points. I say almost, for to be strictly exact I should add that it may in

this respect be divided into two parts, the one right, the other left; the right part is a little more bulging, and a little harder than the other. To percussion the tumor is absolutely and uniformly dull in all its extent; this dulness is continuous, without any line of demarcation, with that of the liver, whose upper limit does not seem to be displaced.

To sum up: there is a voluminous supra-umbilical tumor, obeying the movements of the diaphragm, not separable from the liver, presenting under exaggerated dimensions the form of this organ—such is the result of our investigations. The topographic conclusion is then plain enough; we have to do with a tumor of the liver. This conclusion is confirmed by the presence of a venous network, very highly developed over the abdominal wall; this network, which has been observed to augment rapidly during the days which have followed the entrance of the patient, is quite like that which is seen in advanced cirrhosis. The spleen is normal, the lungs and the heart intact. At the lower part of the left pleura certain light friction-sounds are heard; these are physical signs due to contiguity, which throw no light on the nature of the tumor: the latter has caused some perihepatitis, whence come the pains experienced by the patient; and, by spreading, the inflammation has gained the pleura and has produced a limited amount of dry pleurisy.

We come now to the nosologic diagnosis. What is the nature of this tumor of the liver? To answer this question, we get no hints from the pleural rubbing sounds, nor from the development of the subcutaneous network of veins; can we find any elements for a right judgment of the case in the physical characters of the tumor? Yes, doubtless; but here, if we are not careful, we shall be led astray, for the signs may deceive us. By the definiteness of its contour, by its regular convex bulging, this tumor immediately suggests the notion of a hydatid cyst. This first impression is corroborated by the absence in the patient of all digestive disorder, of all cachectic symptoms. We have really in this case, as much from a local point of view as from that of the general condition of the patient, the normal and typical picture of a huge echinococcus cyst; and I should certainly have halted at this diagnosis, which I believe to be wrong, if I had not followed the rule which I have for many years adopted in cases of this kind. Before pronouncing a positive opinion, and while still dwelling upon the resemblance of the tumor to a hydatid cyst, I have examined the inguinal region; I have found in Scarpa's triangle the glands on both sides augmented in volume, and greatly indurated. Upon this discovery, the absolute importance of which an experience many times repeated has taught me, I have at once rectified my judgment and formulated the diagnosis of cancer of the liver.

This is sufficient to indicate the importance which I attach to the state of the lymphatic glands in the nosologic diagnosis of abdominal tumors; and it is above all to the glands of the groin that attention should be given on such occasions. Last year, my colleague Troisier called attention to the alteration of the cervical and supra-clavicular glands in cancer of the stomach, and more generally, in abdominal cancers. This alteration is important, without doubt; but, in my experience, it is less frequent and more tardy than that of the inguinal glands. I have often, indeed, observed the differences which are easily noticed in the present patient; the inguinal Pleiades are completely and powerfully affected, while in the neck we can barely find on the left side a single gland that is plainly indurated; this gland, however, is not at all swollen, for its volume does not exceed that of a lentil. In many other cases also I have noted a more or less pronounced alteration of the glands of the groin, when a minute examination revealed the perfect integrity of the cleido-cervical glands. I maintain then the preponderant importance of the alteration of the inguinal glands as a sign of abdominal cancer, whether of the stomach or of any other of the viscera.

I will improve this occasion to correct anew a mistake in semeiology which has been committed with relation to the induration of the cervical glands in the course of pulmonary lesions. Chomel, and especially Grisolle, have each maintained that in these conditions the ganglionic induration is a certain sign of cancer of the lung. This proposition is too absolute; a long time ago, in my "Clinic of the Charity," I proved that this alteration may be linked to tuberculous lesions.

Since the entrance of the present patient till to-day, *i. e.*, for nearly a fortnight, we have not observed in him any change other than a rapid enlargement of the subcutaneous venous network of the abdomen; so that to-day, as at the beginning, my diagnosis is founded solely on the alteration of the glands of the groin. If this diagnosis is ultimately

confirmed, our observation will prove once more the semeiological value of these glandular indurations; if it shall prove to have been wrong, the signification of these lesions will be seriously shaken. To speak truly, I have no great anxiety on this score, for thus far this sign has never led me into error. I shall have finished with this first patient when I have indicated the number of the red blood corpuscles; this is 3,545,000, a number below the normal, doubtless, but which does not indicate a cachectic state.

The other patient is a shoemaker, 62 years old, who came to us five days after the preceding, on June 27. He occupies bed No. 28, Ward Jenner. He also suffers with a trouble in his abdomen, and it is not difficult to tell why; this man, in fact, is so emaciated, his complexion is so wan, without at the same time being straw pale, that the moment we knew that the seat of his disease was in the abdomen, we were at once certain that his disease was abdominal cancer.

I examine, and I find the confirmation of the nosologic diagnosis in the lymphatic glands; two groups are involved, but in very different degrees. In the inguinal regions all the glands are voluminous and indurated, and, moreover, perfectly painless. In the left side of the neck two glands are taken, between the two heads of the sterno-mastoid muscle; the upper is not augmented in volume, while the lower is as large as the end of the thumb, is very hard, and dips into the thorax by its inferior extremity.

In accordance with all these facts, and taking due account of the general alteration of the inguinal glands, I am certain that the intermediary glands are equally affected, whether in the mesentery, mediastinum, or in both regions at once. Keep this statement in mind, for we shall certainly have occasion before long to verify it. The blood dyscrasia is more marked than in the other patient, the number of the corpuscles being 2,385,100; but the profound cachexia would lead us to suppose a much more considerable diminution.

This patient, then, is certainly affected with an abdominal cancer; there is no chance for doubt. But where is the seat of this cancer? The topographic diagnosis meets here a real difficulty. For a long time this man has suffered with pain in his abdomen; but the pains have been vague, diffuse, without precise localization; as for pressure, it is not more painful over one spot than over another; these symptoms cannot enlighten us. What have been the other symptoms? Besides the emaciation and the enfeeblement, which cannot give much information, there is only one marked symptom, constipation, which has twice been so obstinate that his medical attendants feared intestinal occlusion. On the first occasion, the constipation lasted seven days. A brisk purgative was given on the eighth day, after many similar cathartic doses had been previously administered, and triumphed over the obstruction. The second period of obstruction was much more grave. It was not only by reason of the absence of stools that the attending physician inferred occlusion of the intestine, but also because this phenomenon coincided with rapid tympanitic distention of the belly, with a sharp exacerbation of the pains, and especially with the occurrence of nausea; it does not appear that there was vomiting. In this situation, the physician who attended this man in town naturally thought of the urgent necessity of an operation, and had him admitted into one of the surgical wards of this hospital. The repeated administration of energetic purgatives restored the normal stools, after which the patient was transferred to my service.

I have told you all the symptoms observed; are they sufficiently significant to reveal the seat of the lesion? Assuredly not. The first idea which they suggest is that of cancer of the intestine; and this idea is chiefly supported by the facts of obstruction twice noticed. But when a cancer causes sufficient stricture of the intestine to give rise to symptoms of occlusion, even temporarily, alternate periods of constipation and diarrhœa are observed in the course of the disease; moreover, the stools are bloody, or else glairy or muco-purulent. Now, all these symptoms are wanting, as we are assured by the daily examination of the fecal matters. On the other hand, in the supposed conditions of an intestinal cancer producing occlusion, palpation as a rule gives positive results when we take pains to examine specially the regions which are the seat of election of this tumor. These regions are, the rectum, the iliac fossæ, the loins, and the sub-umbilical part of the abdomen. But in this patient, these investigations most carefully practised are quite barren of results; the abdomen in its entirety is a little prominent, but in the regions indicated nothing is found—absolutely nothing.

I reject, then, the diagnosis of a localization of the cancer in the intestines; and, without allowing myself to be led astray by

the numerous lacunæ and symptomatic anomalies which seem to condemn this judgment, I believe that we have to do here with a case of cancer of the stomach, and I shall now search for the proof of this supposition in an attentive investigation of the epigastric region.

I note also that it is only in this region that we find anything abnormal; sonorousness to percussion is not complete; there is a shade of dulness, not only in the epigastrium, but also as far as the umbilicus. Over this region, especially midway in it, I feel a little too much resistance; this resistance is uniform, without projection or tumor. In consequence of these observations, I believe that there is a diffuse cancer of the anterior wall of the stomach, although the characteristic symptoms of this affection have thus far been completely wanting.

This diagnosis, I hardly need tell you, does not explain the accidents of intestinal obstruction; but, by reason of the extension of the dulness and resistance as far as the umbilicus, I think that the omentum is involved. It may be, also, that the mesenteric glands participate in the alteration, as I told you when calling your attention to the glands of the groin, and of the two cervical glands. Consequently, I refer the temporary intestinal occlusion to the compression exercised by certain peritoneal or glandular productions, and not to a lesion of the intestine itself. The bringing together of these two cases for purposes of comparison, seems to me to have a real utility, for it illustrates the serious difficulties which may attend both the nosologic diagnosis and the topographic diagnosis of abdominal cancers. It teaches us, besides, the means which we have at our disposal for triumphing over these difficulties, which I ought to tell you cannot always be surmounted.

The second of these patients will certainly succumb in the near future, and in his case, at least, we shall have an opportunity for verifying the exactness of the diagnosis which I have been led to make.

The patient died one month after the foregoing conference. The diagnosis was confirmed before his death by the development of certain very important additional symptoms, viz.: pain on pressure in the epigastric region; frequent vomitings, which were not bloody; and a well-marked jaundice, without appreciable modification of the liver itself. The icterus, accompanied by jaundiced urine and pale stools, was evidently due to compression of the bile-ducts by gastric or perigastric tumors. At a subsequent lecture, Dr. Jaccoud said:

The autopsy, only the principal particulars of which I shall here give in accordance with notes made by M. Duflocq, has revealed the following lesions: Cancer of the lesser curvature of the stomach and of the pylorus; mechanical obliteration by compression of the common bile-duct; retention of bile in the gall-bladder and in the liver; general invasion of the glands. The mesentery forms a block of cancerous nodules of various sizes. The glands of the lesser curvature of the stomach, and the prevertebral and pelvic glands are greatly swollen, and so are the inguinal, bronchial, and cervical glands. The intestine is sound throughout its whole length; the great omentum is intact. The spleen is diminutive. With the exception of the lesion of the omentum, which we expected to find and did not find, the diagnosis was verified in all its parts.

The nosologic diagnosis in the case of the first patient, founded solely on the alteration of the glands, has been also confirmed. The following note from M. Bourcy will inform you of the clinical phenomena which were developed after the last lecture, as well as the results of the autopsy.

During the month of July, the general condition remained quite good. In only the last days of the month the appetite diminished, then failed altogether; emaciation came on, there was every evening a little œdema about the ankles; in a word, the first symptoms of a cachexia of which the progress was thenceforth extremely rapid. In August, there were on two occasions abundant coffee-ground vomitings. From that time, the patient took almost no food, and the emaciation became extreme. The œdema of the legs was permanent; it spread to the thighs, the scrotum, the abdominal wall, and was accompanied with ascites. The excessive dropsical enlargement of the inferior members and of the abdomen presented a most striking contrast with the emaciation of the trunk, the arms, and the face. From that time, it was no longer possible to examine the deep abdominal viscera.

The inguinal glands remained to the end tumefied to the same degree as they were at the entrance of the patient; but the left cervical gland grew rapidly, and at the end of September it had attained the size of a large nut. In September, the cachexia became more and more pronounced, eschars formed on the sacrum, and the patient

succumbed on the morning of the 30th, after several days in which he was in a semi-comatose state.

The autopsy revealed the following alterations. On opening the abdomen, a considerable quantity of ascitic liquid escaped; the liver was found occupying all the epigastric region, completely covering the stomach, and literally stuffed with yellowish cancerous nodules of variable size; it was, therefore, the cancerous liver that formed the epigastric tumor felt during life. The determination of the primary centre of the cancer was quite easy. The *stomach* presented around the pylorus a sort of cancerous collar deeply excavated by jagged and sanious ulcerations, with conservation of the pyloric lumen. Here was the primary focus of the cancer, from which were disseminated by the absorbents numerous secondary nodules:

1. In the liver, which, augmented in size but not deformed, without large superficial and salient projections, was infiltrated with innumerable nodules; the latter were isolated in places, confluent in others, of volume varying between a hemp-seed and a chestnut, of a yellowish-white color, and trenching sharply on the substance of the liver, which was reduced to small dimensions. 2. In the glands of the hilum of the liver, which made strong pressure on the vena portæ, causing the ascites. 3. In the head of the pancreas. 4. On the inferior aspect of the diaphragm. 5. In the tracheo-bronchial glands. 6. In one of the cervical glands on the left side.

The lungs, the heart, the liver, the kidneys, the intestine, the genital organs, presented no secondary nodules.

—Dr. Wilhelm Zimmermann, of Greifswald, has been appointed Assistant in Anatomy in the University of Berlin, as successor to Dr. Klaatsch, who is to go to Jena.

—The enterprise and progressive spirit of Japanese surgeons may be inferred from the fact that the *Sei-I-Kwai* medical journal, August, 1888, contains a paper on "Three Successful Cases of Extirpation of Ovarian Dermoid Cysts," and one on the "Use of Cocain in Laparotomy for Extra-Uterine Pregnancy of 14 Months." So far as we know, this makes only the second case in which an abdominal section has been made with cocaine as a local anæsthetic. The first was reported by Dr. Roswell Park, in the *Medical Press of Western New York*, August, 1888.

COMMUNICATIONS.

HEMORRHOIDS AND THEIR TREATMENT.[1]

BY G. H. KIRWAN, M.D.,
WILKES-BARRE, PA.

The subject assigned for to-day's paper and discussion is one of such importance to practical physicians and surgeons that it might wisely have been assigned to some older and abler member than I; but, appreciating the honor you conferred in selecting me, I have done with the subject the best that, with a very limited practical experience, I could, viz—given you in what follows a compilation from some of the best authorities, and a *résumé* of some of the different recent methods of treatment, together with a comparison of the results obtained from each; and finally, have drawn conclusions therefrom.

Hemorrhoids, hemorrhoidal tumors, or the hemorrhoidal disease are medical terms used to define a diseased condition of the lower extremity of the rectum: the morbid condition that exists is almost always a dilatation or varicosity of the blood vessels; but these changes vary, according to the kind of hemorrhoidal tumor present, and will be described in defining the different varieties. Hemorrhoids are classified as *internal* and *external*, according as they are within or without the external anal sphincter. Such a division, however, is a merely arbitrary one. Of the so-called external hemorrhoid there are two varieties: the one a mere cutaneous teat or tab of redundant tissue so often observed about the margin of the anus; this variety, which is painless, may be present for years without giving any trouble, and is frequently simply the remains of the second variety after absorption has taken place; the second variety is a tense, bluish, smooth tumor due to dilatation alone, or to dilatation and subsequent extravasation of venous blood.

A more scientific classification of hemorrhoids, however, is one based upon the pathological changes that have led to their production. Considering them from this standpoint we have of internal hemorrhoids three distinct varieties, viz.: the Capillary, the Arterial, and the Venous hemorrhoid. The capillary hemorrhoid is really an erectile tumor (though never very large), composed of the terminal branches of the arteries and veins and the capillaries that unite them.

[1] Read before the meeting of the Luzerne Co. Pa. Medical Society, September, 1888.

It strongly resembles an ordinary small arterial nævus, and bleeds upon the slightest touch, hemorrhage being the chief symptom which distinguishes this variety. When it exists, hemorrhage always follows defecation, and this is the form ordinarily known as bleeding pile.

The arterial hemorrhoid is composed of a mass of freely anastomosing, tortuous, and varicose arteries and veins, bound together by connective tissue. The veins may be dilated into sacs or pouches, and the artery which enters at the base is of large calibre. Such a hemorrhoidal tumor is of large size and smooth surface, and is liable to inflammation, hemorrhage, and prolapse.

The venous hemorrhoidal tumor consists entirely at first of a simple varicose condition of the large veins beneath the mucous membrane of the rectum; later the veins undergo degenerative changes until a large, bluish, hard tumor is formed, which always comes out of the anus on defecation and assumes, from repeated exposure, a cutaneous character.

All the best authorities insist that these three varieties of internal hemorrhoids are well marked, and may exist at the same time, but they must be distinguished from each other in treatment.

The ordinary symptoms of internal hemorrhoids are a feeling of weight or fulness with a throbbing sensation in the rectum—in fact, a continual consciousness (not observed in health) that one has a rectum and anus, and that something is the matter with them. Bleeding upon defecation, and in some cases for a little time after it, is another symptom, not, however, constant in all cases. Other symptoms are: constipation; a feeling of weight and heaviness about the parts; a frequent desire to go to stool, with the belief that a full and free movement of the bowels will take place and relieve the sensation of uneasiness; and lastly, a protrusion of the hemorrhoidal tumors through the anal sphincter.

The feeling of weight and uneasiness hardly ever amounts to pain; if there is severe pain, it will usually be found after dilatation that a fissure or ulcer exists as a complication. When the hemorrhoidal tumors come down and are caught in the grip of the sphincter, there will be, of course, quite severe pain, which is immediately relieved by replacing the tumors within the bowel.

I have gone thus lightly and rapidly over the definition, varieties, pathology, and symptoms in order to devote most of my space to what I take it should be the principal part of all papers read before this Society, namely, treatment.

On the medical treatment of hemorrhoidal tumors or the hemorrhoidal disease, but a few words are necessary, as perhaps no case of well-developed internal hemorrhoidal disease has ever been cured by medical treatment alone, and but very few are even benefited by it, except temporarily. If hemorrhoids depend on congested or diseased conditions of the liver, or upon obstruction to the portal circulation from any cause, the relief of this condition by appropriate treatment will materially benefit the hemorrhoidal disease. In the relief of obstinate constipation, special attention should be given to the state of the bowels; the recumbent position should be assumed at stool; unstimulating food and, if addicted to its use, complete abstinence from alcohol should be advised. Locally, some astringent ointments or suppositories, and the injection into the rectum of very cold, even iced, water may be employed. These are about the usual remedies, but any or all of them as a rule frequently fail even to relieve, and, I repeat, rarely if ever effect a cure in advanced internal hemorrhoidal disease.

In coming now to the most important part of our subject, the surgical treatment of hemorrhoidal tumors for their radical cure, I have selected for consideration, from the dozen or more surgical procedures suggested and practiced, only four, viz.: 1. The Injection Method, sometimes called Kelsey's. 2. The Clamp and Cautery Method, called Smith's. 3. Mr. Whitehead's Operation. 4. The Ligature Method, with incision, Mr. Allingham's.

The injection method is performed as follows: An enema of hot water having been used and the patient having forced down the tumors into view as much as possible by straining, about five drops of a fifteen, thirty-three, or even fifty per cent. solution of pure carbolic acid is injected into the substance of the largest of the tumors. After this the tumor is replaced within the bowel. If by the second day after this injection no pain or soreness exists, a second tumor is similarly dealt with, and so on till all are treated.

Dr. Charles B. Kelsey, of New York, whose name is intimately connected with the treatment of hemorrhoids by injection, has materially modified his views as to the effectiveness of this method in all cases since the publication by him in 1885 of 200

cases treated in this way. He says in the latest edition of his work on Hemorrhoids, "that he has since had pain, marginal abscess, ulceration and fistula follow its use," and that "the treatment by injection may not result in a radical cure." He further says: "In a word, the question narrows itself down to this: on the one hand we have a method safe, certain, and practically painless (the clamp and cautery method), but which involves the administration of ether and the performance of what the patient dreads —a surgical operation and a certain confinement to the house for a few days; on the other hand, a method which involves fully as much of an operation as the other, only more quickly performed, and without ether, and which is neither radical nor certain in its results." And he further says: "All the patient actually gains in the most favorable case is the avoidance of a safe operation, which he fears, to submit to an uncertain one, which he does not fear because of his ignorance."

Dr. Bodenhamer, of New York, an eminent specialist, says: "Never having treated a case of hemorrhoids by the injection method, I have therefore no experimental knowledge of it; but of its bad sequelæ I have abundant experience and proof, having since 1875 treated thirty-five cases of patients who had submitted to this operation, but who were not only not cured but much injured in various ways by it. The most of these cases had anal abscesses and anal fistulæ to follow it; others had anal fissure to result from it; others again had a thickening and induration of the coats of the lower portion of the anal canal, which interfered greatly with the normal action of the external sphincter. In some of the cases the operation was followed by extensive sloughing of the cellular membrane in the vicinity of the tumors, and by persistent hemorrhage, and others have had hard nodules follow the treatment. In all these cases, as far as I could learn, carbolic acid in different degrees of strength was the agent which had been used. In 1875 I made the following remarks in the New York *Medical Record:* 'The method of treating hemorrhoidal tumors by injecting them with coagulant hemostatic and cicatrizant solutions is of quite recent date. From the great excitement recently manifested by a few fanatics concerning this method, some were inclined to raise the cry "*eureka*," or led to believe that it, like Aaron's rod, was destined to swallow up all other methods. It may be remarked, however, with regard to this new candidate for fame, that as yet it has no status in surgery, and it is questionable whether it ever will prove a real benefit to, or an advancement in, that science as it regards a safe and certain remedy in the treatment of hemorrhoids especially.'"

Mr. Allingham says of this method of treatment: "I have tried the injection plan in many cases. The result was generally much pain; more inflammation than was desirable; a lengthy treatment; and the result doubtful — *certainly not* a radical cure." And again: "All attempts to destroy vascular growths by causing coagulation of blood or inflammation in them while they are not shut off from the general circulation *must be fraught with danger*. You can have no guarantee that the coagulum may not break down and minute particles of dead tissue find their way into the vascular or lymphatic systems and result in embolism, or pyæmia, or both."

The clamp and cautery method is a well-known form of treatment which has many eminent advocates. The name of Mr. Henry Smith, of London, is most frequently associated with it. "In its performance each pile is seized by a volsellum and drawn well down. The clamp is then applied so as to embrace its base; the portion above the clamp is cut off with scissors, and the stump cauterized, usually with a Paquelin instrument." Mr. Allingham says of this operation: "In my opinion it has little to recommend it: as regards danger to life (after all, the issue of the *greatest* moment), as far as my most careful researches have led to a conclusion, it is quite six times as fatal as the ligature properly and dexterously applied; there are, moreover, these disadvantages: the burning causes very great pain after the operation, especially if the skin is involved; secondly, hemorrhage is more likely to occur than after the best mode of operating, greater sloughing of the parts takes place, and a longer period is required for healing."

Dr. Kelsey, of New York, gives as his views a directly opposite opinion; he says: "I prefer the clamp and cautery to all other radical measures, as being less painful and giving a quicker recovery."

Mr. Whitehead's operation is a plastic operation for the radical cure of hemorrhoids of recent date, it being little more than a year ago that its originator, Mr. Walter Whitehead, of London, first called attention to it. It is performed as follows: The pile-bearing mucous membrane is dissected off from the skin border of the anus

all around, after the manner of performing total extirpation of the rectum (except, of course, more superficially), and all the pile-bearing area removed. All bleeding vessels are twisted, and the mucous membrane above the pile-bearing surface is brought down and stitched to the skin border. Dr. Robert F. Weir, of N. Y., has performed this operation for hemorrhoids many times, and I believe gives it his preference in all suitable cases. Mr. Whitehead himself claims many points of advantage for it over all other surgical procedures, but those generally conceded are that the hemorrhage is trifling, the union is primary, and retention of urine very rare. For those who prefer the very latest in the surgical treatment of hemorrhoids, this operation is here given.

The *Pittsburgh Medical Review*, in a late comment upon Mr. Whitehead's operation and Dr. Weir's method of performing it, says: "It is certainly a much more surgical method than the old ligature operation, but to all appearances offers no special advantages beyond the satisfaction it affords the surgeon in performing a plastic operation, and freedom from subsequent retention of urine." Mr. Allingham's objections to this operation are that it is in most cases a more formidable undertaking than the existing condition warrants; that the length of time required for the operation, and the excessive hemorrhage as compared to the ligature method, make it inferior to other methods in most cases.

We come now to the consideration of what I believe from a careful study of this disease is *the* operation for the radical cure of hemorrhoidal tumors; although, of course, it will be understood that no one method can be applicable to all cases. *Exempli gratiâ*, take the small capillary hemorrhoid described; one application to it of fuming nitric acid, properly made, cures it forever. We will now consider the treatment of hemorrhoidal tumors by the ligature; and when I speak of the ligature operation I mean the operation by incision and ligature known as Mr. William Allingham's. He thus briefly describes it in his works:

"After the patient is etherized and placed in position, gentle but complete dilatation of the sphincters is done." (I desire here to impress upon all who do not know it from experience, the *very great importance* of gentle but entirely complete dilatation, and consequent temporary paralysis of the sphincters before any operative interference.) "The hemorrhoidal tumors are brought down one by one; then, with a pair of sharp scissors, the pile is separated from connection with the muscular and submucous tissues. The cut is made in the sulcus, or white mark which divides skin from mucous membrane. This incision is carried a distance up the bowel until only an isthmus of vessels and mucous membrane is left; a strong silk ligature is placed at the bottom of the groove, and, the assistant drawing the pile well out, the ligature is tied high up at the neck of the tumor as tightly as possible. A portion of the tumor may now be cut off, or the whole returned within the bowel. After all tumors are thus treated, a suppository of morphia is placed in the rectum, a pad of antiseptic wool is placed over the anus, and a tight **T** bandage completes the dressing." This briefly is the ligature operation, and it probably has effected more cures of hemorrhoidal disease than all the other surgical procedures combined.

That this operation is grounded upon a sound surgical basis no practical surgeon can dispute. Mr. Allingham (than whom there is perhaps no greater authority living) has performed this operation in private and hospital practice more than two thousand times with but three deaths, and he says of it: "I do not think in the whole range of surgery there is any procedure worthy of the name operation which can show a greater amount of success or smaller death-rate than the ligature of internal hemorrhoids." And again he says: "It is both the safest and quickest operation to perform in all cases of well-formed hemorrhoidal tumors."

Dr. Bodenhamer, of N. Y., says: "I have yet to encounter my first serious accident."

Dr. Gross says: "The operation is as simple of execution as it is free from danger and certain in its results."

Recognizing that a paper of this kind should contain something more than a mere compilation from books accessible to all of us, and being able to give very little from personal experience, I took the trouble to obtain by correspondence the following opinions upon the subject from eminent men, which certainly embody more recent views as to treatment than any of the text-books.

I submitted, to the men whose names follow, the following five questions on mooted points in the surgical treatment of hemorrhoidal tumors. I will read you the first question and their separate replies.

The first question was: "To what extent do you carry out in your surgical treatment of hemorrhoids the principles of antisepsis as ordinarily employed in operation wounds?"

1. "Only in having my instruments and the water used aseptic."—D. Hayes Agnew, Philadelphia.

2. "General cleanliness."—Thomas G. Morton, Philadelphia.

3. "Thorough cleansing before, and frequent irrigation after operation, with bichloride solution."—Louis McLane Tiffany, Professor of Surgery, University of Maryland, Baltimore.

4. "I treat antiseptically as far as the nature of locality permits—using corrosive sublimate cloths, iodoform, etc."—John H. Brinton, Professor of Clinical Surgery, Jefferson Medical College.

5. "To its fullest extent."—Joseph D. Bryant, Professor of Clinical Surgery, Bellevue Hospital Medical College.

6. "I use all necessary antiseptic precautions."—Dr. William Bodenhamer.

7 and 8. Mr. Allingham, of London, and Dr. Kelsey, of N. Y., in reply to my queries kindly mailed me their latest books from which their views are to be taken. Neither refers to the antiseptic principle at all in his book.

9. "To obtain as much cleanliness as is possible in this part of the body—bichloride solution externally and Thiersch's solution within the rectum and anus."—John A. Wyeth, N. Y.

The second query was: "Do you rely entirely, or at all, on cocaine or any form of local anæsthesia in your surgical procedures for the cure of hemorrhoids?"

1. Dr. D. Hayes Agnew, of Philadelphia, says: "No."

2. Dr. Thomas G. Morton, Surgeon to Pennsylvania Hospital, says: "No. Often do not use anæsthetic for internal, but always for external hemorrhoids."

3. Dr. Louis McLane Tiffany says: "Compression by clamp."

4. Dr. John H. Brinton says: "I have employed local, but prefer general anæsthesia from ether inhalation."

5. Dr. Wm. Bodenhamer, of New York, says: "I now use cocaine as a local anæsthetic in all cases in which general anæsthesia is not *particularly* indicated. I have found it of much value."

6. Mr. William Allingham, of London, says "No. It is only of use when mucous surfaces are to be operated upon — as cocaine does not sufficiently deaden the sensibility of the skin to make it of practical service."

7. Dr. John A. Wyeth says: "I have used cocaine (4 per cent. solution), but lately have found that most patients do not suffer more from the carbolic mixture than from the distention by cocaine. When I do the ligature operation, ether narcosis."

8. Dr. Charles B. Kelsey says: "In minor operation the drug used hypodermically is perfectly satisfactory. In larger ones it is not to be relied on absolutely, and may have to be supplemented with ether."

9. Prof. Joseph D. Bryant says: "I have done so, but do not make it a practice—can be done easily if case be a simple one."

The third question asked was: "Are you convinced from experience of the permanency of the cure of hemorrhoids by the injection method of treatment?"

1. Dr. D. Hayes Agnew: "Yes, in well-selected cases."

2. Dr. Thomas G. Morton: "By no means."

3. Dr. L. McLane Tiffany: "My experience does not justify an opinion."

4. Dr. John H. Brinton: "I have seen cases operated on by others where the hemorrhoids still existed, but I knew nothing of the extent of operation. I have seen the saddest results in the way of sloughing from the injection of carbolic acid. If used at all, believe it should only be when pile is thoroughly clamped before injection. I would only resort to this method in exceptional cases."

5. Dr. Joseph D. Bryant: "Am convinced that in selected cases this method causes as good results as any; but it cannot produce better final results than tying."

6. Dr. W. Bodenhamer: I have given Dr. Bodenhamer's views under the description of this operation, in which he condemns it in severe and measured terms.

7. Dr. C. B. Kelsey says: "It is neither radical nor certain in its results."

8. Mr. William Allingham: "The injection of carbolic acid into the interior of piles may in some instances stop the bleeding for a time, yet it cannot and does not in any way remove the tumors."

9. Dr. John A. Wyeth: "I believe injection will cure a hemorrhoid thoroughly injected. The process of cure demands inflammation (preferably sub-acute) and cicatrization (or shrinking)."

The fourth question was: "Did you ever know personally of a permanent cure of internal hemorrhoids by simple dilatation of the sphincters alone?"

This query was asked because in this city during the early spring and summer this method was practiced by a notorious quack on many people, who, after submitting to it, believed themselves cured; but in several of

them, to my personal knowledge, recurrence has taken place—not, however, until the disappearance of their former medical attendant and their cash. This method has some legitimate foundation, however, having been advocated by Verneuil and other eminent French surgeons.

1. Dr. D. Hayes Agnew says in reply to it: "No."

2. Dr. Thomas G. Morton: "No."

3. Dr. L. McL. Tiffany: "No experience."

4. Dr. John H. Brinton: "I cannot answer positively."

5. Dr. Joseph D. Bryant: "Have known relief to follow, but not a permanent cure."

6. Dr. Bodenhamer: "I never did."

7. Dr. John A. Wyeth: "No; and despite Verneuil's statement, cannot believe it possible."

8. Mr. Allingham: "It will give wonderful relief in selected cases."

The fifth and last question was: "What surgical procedure do you consider the safest, most generally applicable, and yielding the best permanent results in the surgical treatment of hemorrhoids?"

1. Dr. D. H. Agnew: "When large, I prefer the ligature."

2. Dr. Thomas G. Morton: "My universal practice is the ligature for internal and the ligature and excision for the external variety."

3. Dr. L. McL. Tiffany: "I probably use clamp and cautery as often as any other."

4. Dr. John H. Brinton: "I prefer ligation of internal hemorrhoids. I use a fine linen cord soaked in sublimate solution, and when the hemorrhoid has a partial cutaneous covering I form a track with knife in the skin covering, to divide nerves, and thus avoid pain after the old method."

"My opinion is decided in my preference for this method."

5. Dr. Joseph D. Bryant: "Ligation with cat-gut."

6. Dr. Bodenhamer: "I consider ligation, if judiciously and properly applied, the simplest, safest, most certain, and most effectual of all known methods. It has the recommendation, the advocacy, and the indorsement (with but few exceptions) of all the leading surgeons of Europe and America."

7. Dr. John A. Wyeth: "Allingham's operation—ether narcosis."

8. Dr. Charles B. Kelsey: "I prefer the clamp and cautery to all other radical measures, as being less painful and giving a quicker recovery."

9. Mr. Allingham: "Ligature with incision, for reasons given under the description of the operation."

From a careful review of the best recent works on the subject, from a very limited personal experience, and from the very able opinions obtained by correspondence and just read to you, I have drawn the following conclusions:

1. The principles of antisepsis should be carried out (as far as possible) in this as in all other surgical operations.

2. Local anæsthesia is not to be relied upon in surgical procedures for the radical cure of hemorrhoids.

3. The injection method of treating hemorrhoidal tumors is not reliable, not safe, and not comparable with safer and surer methods.

4. Simple dilatation of the sphincters alone probably never cured a case of well-developed hemorrhoidal tumors.

5. Mr. Allingham's operation by the ligature with incision is beyond a doubt the safest, most generally applicable, and yielding the best permanent results in the surgical treatment of internal hemorrhoidal disease.

PREVENTION OF CONCEPTION.

BY THOMAS A. POPE, M.D.,
CAMERON, TEXAS.

I accept the wise and timely suggestion in the REPORTER, Sept. 15, 1888, to discuss the prevention of conception, because the subject is one that comes almost daily before every physician; and, as there has not heretofore been any extended public discussion of it, every physician has heretofore had to deal with the matter as seemed best to himself, without advice or help from his professional brethren. In other matters we are greatly aided by the recorded experiences and conclusions of others, but on this subject we get no such help.

For myself, I have some decided opinions about the prevention of conception, and if I am wrong I would be grateful to be set right. One man, however wise, might easily come to wrong conclusions if left to himself, but a large body of educated, fearless and conscientious gentlemen by the thorough discussion of any question are certain in the end to be right.

I believe this world would be better and our people happier if the child-bearing period of woman began at twenty-two and ended at thirty. If such were the case, there

would be less poverty, ignorance, crime and disease, and of course more intelligence, refinement, comfort and happiness. The vital statistics of the United States have never been gathered and collated as they should have been in the past, and ought to be in the future, so there is no way of arriving at exact conclusions concerning the increase of population. But the census of 1880 showed nearly three-fourths of a million net gain from births. This would show a net increase of about one and one-fourth per cent. per annum. But even if the net increase of our population from births and immigration should amount to two per cent. per annum it would be many years before the conditions that Malthus feared in Europe would obtain here. Malthus perhaps forgot when he wrote that almost one-half of the world was unpopulated, and that ages must elapse before the whole would be settled as densely as some parts of Europe were sixty years ago. But while we need not perhaps urge the same reasons now that Malthus did for limiting the population, the time will soon come when the question: Wherewith shall all these people be clothed and fed? will be a vital one. There are no new worlds to conquer. Every inhabitable part of the globe now has its tenants, and in many portions of it the population is now so dense that mere existence is a struggle, and the population is everywhere increasing. The laws just passed by Congress restricting Chinese immigration and prescribing the return of improper immigrants from Europe constitute the beginning of a struggle for the survival of the fittest that henceforth will not cease as long as mankind shall continue to multiply and replenish the earth.

Let us now examine somewhat in detail some of the reasons against too frequent conception. And, first, it often causes the death of the preceding child. It is a very common occurrence for the wife to become pregnant within from two to six months after confinement, and then of course the little babe is weaned and must be artificially fed. I cannot state accurately how many of children so weaned and artificially fed die; but I am certain that at least one-half of them die in infancy, and half of those that survive are neither strong nor healthy.

It will, of course, be understood that I am speaking of poor people, where the wife is compelled to work and cannot procure for the child the things it needs or give it the attention and care it should have. And I here remark that very frequent conception is now mostly confined to the poorer class. The rich, in town and country, already limit the number of their offspring; but for a different reason, perhaps, from that for which I would limit it among the poorer people. I have no doubt that most of the criminal abortions occasionally seen in the country and so often occurring in the cities are due, not to the fact that no children are wanted, but to the fact that the mother feels she cannot educate and care for so many, and becomes desperate and commits a crime rather than bear children she knows cannot be adequately provided for.

There are very many women who ought not to bear children because their children are likely to be diseased in body or mind, and, if they survive childhood, will be a burden to themselves and society. This is a most important reason, and the subject deserves a chapter to itself; so I shall only advert to it here, and leave its further consideration to some future time or other writer.

In the year 1880 there were 5646 deaths from child-birth in the United States. The number of women who died that year in child-birth was about equal to the number who died from pneumonia within the child-bearing period. If it were possible to permit only those to become pregnant in whom no contra-indication exists, the death-rate in child-birth, instead of being nearly four in each thousand, would be *nil.* Most women who bear many children become prematurely old. This is rather because of the mental anxiety and worry of watching over and caring for so many children than from the effect of child-birth, but this with its attendant troubles is no doubt an important factor. As a rule, women at forty, who have given birth to not more than three or four children, are, other things being equal, in better health and every way better preserved than the women who have given birth to from six to ten. I cannot think that the Creator intended that woman—the best and fairest part of His handiwork—should become a mere machine for the propagation of the species; but such she would become if she were perfectly healthy herself, and had a healthy husband, if no means were used to limit the number of her offspring. Such a woman would be confined almost exclusively to her home, social intercourse with friends would be limited, and, however bright an ornament of society she might have been, it would know of her only through the birth and perhaps death column of the daily paper. Some of her children would be neglected, and she could

give to none of them the attention she could have given if the cares of maternity had not been so many and so exacting. The health of children depends greatly on a mother's care, and if she has two or three, or even four children, she could look carefully after each child and protect them all from disease. From the reasons given, it seems certain that prevention of conception, if judiciously practised, would lessen the death-rate of both mothers and children and almost eradicate many hereditary diseases; our offspring would be healthier and happier; idiocy would be unknown, and insanity infrequent.

Now let us look for a moment at the economic side of this question. To clothe, feed and educate his offspring properly would require an addition to the parent's income of at least $400 at the birth of each child. That is, if man and wife could live comfortably on, say, $800 a year, then one child would call for $1200 for the three—a second child $1600 for the four, and so on. What proportion of our population would be able to meet the increased expenditure so essential to making of the child a good and useful member of society?

There are to-day in the United States about 9 millions of families, averaging about seven persons to each family. Now I think it fair to assume that the net average income of over one-half these families would fall below $800 per year, and perhaps even less than $600. One-half of the families of the United States cannot properly feed and educate their children, and with a majority of them it is a struggle to maintain an humble home with few comforts and no luxuries, and the little ones must at the earliest possible moment become breadwinners in order to eke out their parents' scanty income. Does it not seem like the greatest cruelty for a man and woman, with no visible means of support, who live by the proceeds of their daily toil, which is perhaps barely sufficient for their own needs, to bring into the world a large family when they must know that every child has no heritage but one of poverty, ignorance and toil? When they know that these children in the period of childhood and youth, when in need of judicious care and training, must begin a life of labor and mental darkness with but little promise of any lightening of the load which their very existence has forced upon them? The men who lead in every sphere of life, in politics, in war, in science, or in religion, do not, as a rule, lead because they have bigger or better brains than many of their fellow-men, but rather because they had more judicious training and better opportunities to improve and cultivate the talents given them by nature. I am sure that thousands of men and women sleep in unknown graves to-day, who, if they had had early and kindly care and been given the proper opportunities, would have been famous in some line, and would have had marble monuments instead of pine boards to mark their final resting-place. If the number of children were limited, better opportunities and better care would be for all, and all could have a start in life so fair that success would come to all who deserved it. Again, crime would be lessened by limiting the number of offspring, because there would be less offspring of vicious parentage and, as each child could be better educated and have more comforts, there would be less temptation to begin, as most criminals do, a life of crime in youth or childhood. I have recently read an article in the *Amer. Journal of Obstetrics* which dwelt considerably on the "crime for which Onan was so severely punished." If the distinguished author had read his Bible before he wrote the article, he would not have said "The boastful citizen (of to-day) . . . does not hesitate to commit the crime for which Onan was so severely punished," because he would have seen that Onan was punished for attempting to evade the consequences of a custom which would itself be regarded as indecent to-day. If the author of the article above quoted means that "wasting seed" is a crime, then a man would commit a crime every time he had intercourse with his wife after she became pregnant, for his seed would then certainly be wasted. And it would be a crime to have intercourse with her at any period when she could not become pregnant. To prevent being branded as a criminal, a man would have to possess a most thorough and scientific knowledge of the physiology of generation, and govern himself accordingly. I say there is no law, human or divine, written or unwritten, that forbids the prevention of conception when any valid reason for the prevention exists. And, in this, I am not saying anything in favor of licentiousness or providing a way to cloak immorality. I am speaking of persons lawfully bound together in wedlock.

Paul, in his letter to Timothy, says that a man who does not provide for his family is worse than an infidel. Then, would it not be a crime against society and a sin against religion to beget children when one knew beforehand that he could not provide for them?

The Editorial in the REPORTER of Sept. 15 suggests several other points that deserve attention, and I hope others will supply what I have omitted, which yet ought to be said. For the present I will content myself by calling attention to the following remarks of Dr. J. Ford Thompson, at a meeting of the Gynæcological Society of Washington, D. C., on May 28, 1888.[1] "A great deal has been said and written on this subject that is not true either scientifically or in fact. There is no proof that preventive measures do any harm. Over-indulgence may affect the male injuriously, but self-limitation does not. What difference physiologically does it make whether the emission takes place in a condom or in the vagina? None, because the sensations are the same and the effect on the male is the same. The most common method is withdrawal, and what difference does it make? There is more room for unpleasant effects than from emission in a sheath, but he doubted any deleterious effect. The sexual act is not completed, but the emission takes place, consequently he doubted whether this method was attended with any injurious effect upon the male.

"Now, on the part of the female, let us consider the effects of these methods upon her organism. With the use of the condom the sexual act is completed. He did not believe in the many theories of the part the female organ takes in coition, such as the descent and opening of the cervix and the aspirating effect of the uterus. The method of withdrawal may occasionally injure a female, but such cases are not as frequent or numerous as we are led to suppose. The orgasm in the female is not hastened by the emission of the male, but precedes it. If this is true, then withdrawal is not injurious to her; and if it is not true, the only effect is to leave her unsatisfied. The use of the hood by the woman is practically the same as the use of the condom by the man, and does not interfere with the complete act of coition. So far then as mechanical appliances are concerned, there is no proof that they do any harm to either party and their evil effects have been greatly exaggerated. Withdrawal is the only case where physical injury may result, and even this is very doubtful.

"The cold-water douche may have a deleterious effect upon the female, but it is questionable whether tepid water or water impregnated with carbolic acid or astringents injures her. It cannot be proved that any of these methods is injurious."

[1] *American Journal of Obstetrics*, Sept., 1888.

A SEVERE RAILROAD ACCIDENT.

BY T. F. McGEE, M.D.,
TRINIDAD, COLORADO.

J. T. Link, thirty-two years old, brakeman on the D. T. & F. W. R. R., met with injuries external and internal; the latter of which were very severe and accompanied with great shock. On September 9, while sitting on the side of freight train, running at usual speed, he was looking back at a hot box, when he was struck on the left side of the head, while passing through a narrow bridge, splitting his ear, and throwing his body through the bridge to the ground, some distance below. He was brought to this city, some five hours later, and by instruction of Supt. Grover of said road, he was placed in my care for treatment. I was ordered by telegram from Chief Surgeons Drs. Beall and Adams, of Fort Worth, Texas, to forward the injured man to the hospital, if his condition would admit; but, owing to his severe shock and the nature of his injuries, I declined to do so.

He was struck on the left side of his head, and his right shoulder, and almost the entire right lobe of his liver, together with a considerable portion of the dorsal spine, were so severely injured as to cause ecchymosis, which appeared several days afterward, showing the deep nature of the internal injuries. There was also slight hæmatemesis, and slight hemorrhage from the cranium—not from the split ear. When I first saw the patient, his pulse was small and feeble, but regular; inspirations about fourteen, every breath causing an agonizing pain. I gave him a hypodermic injection of sulphate of morphia, and ordered hot applications to the injuries, and left small doses of morphia to be given by the mouth, as might be necessary to keep him quiet during the night, leaving word to let me know in case he became restless.

I visited the patient next morning, found his pulse seventy-two and very full, and that his bladder had acted once during the night. In the afternoon his pulse ran up to ninety-six; his temperature was 102° F., and he was suffering greatly. I ordered Rochelle salts to move his bowels, and hot flax-seed poultices sprinkled with chloroform liniment to be put on over the entire injured surface, as hot as the patient could bear. Under the above treatment, he became more quiet, his bowels moved freely, his pulse came down to normal, and his temperature fell to 99° F. But these favor-

able symptoms lasted only a short time, when he began to suffer as much as ever; the hot poultices were continued; and as long as they remained hot and he was kept under the influence of very large and often repeated doses of morphia, his sufferings were to some extent bearable.

The fourth day he began to have hemorrhage from the bowels, averaging from eight to sixteen operations per day. From the fifth to the sixth day from the time he began to pass blood from the bowels, the discharges assumed the character usual in intestinal catarrh. Dr. Omstead of this city saw the patient with me the third day after the accident; and, on account of the high-colored urine and the full pulse, suggested five-grain doses of antifebrin every four hours.

The suggestion was a good one. Under the influence of antifebrin the kidneys acted much better, and the patient rested much easier.

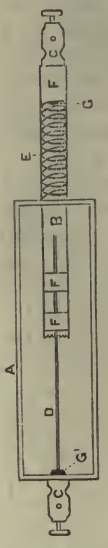
His temperature never exceeded 102° F.; and his pulse never ran over a hundred. His urine was high-colored, and his suffering was intense. At times he had stertorous breathing, which of course alarmed me, with frequent and severe hiccoughing, which did not lessen my fear; and the above symptoms lasted from eight to ten days.

The patient is now able to walk about with his arm in a sling, as he still suffers more or less pain under the right shoulder-blade. He informs me, since his recovery, that he has no recollection of anything during the first five days succeeding his injuries.

SIMPLE ELECTRICAL APPARATUS.

BY SUMNER GLEASON, M.D.,
CARTHAGE, NEW MEXICO.

Electricity is admitted to be a potent factor for good when properly used in some of the derangements of the human system. Here there is a large field open for research and a rich harvest to be gathered. The medical profession is just beginning to learn how to make use of this agent; but a large number of physicians are still in ignorance as to the methods of operation or the results to be obtained. This is in great part due to the expense of the apparatus necessary. Now a convenient galvanic battery for office work can be made for a very few dollars, and any physician of a mechanical turn of mind will take pleasure in putting it together. Zincs and carbons with attachments can be obtained from any manufacturer of electrical apparatus. These should be attached to a thin board, so that they can be raised from the cells when necessary to add more water. Cells can be made of old bottles. To cut off the tops, place the bottle in the corner of a box which holds a steel wheel glass-cutter at the place at which it is desired to cut the bottle; turn the bottle until the lines meet; then heat the line in a flame for a moment and plunge the bottle in cold water; the top will then split off neatly in the line marked. Paraffine the inside of the jar for about an inch from the top. The carbons and zincs should also be paraffined above the level of the fluid, in which they may remain constantly. The fluid consists of a saturated solution of bichromate of potash and muriate of ammonia, the latter being pure. Thirty-six cells will give enough current to commence with, and, after becoming familiar with its effects, as many cells can be added as are desired. A milliampere-meter is not a necessity for the novice. He will learn more by experimenting on his own person; but, of course, cannot expect to obtain as good results from his battery.



A. Wooden box.
B. Glass tube filled with water.
C C. Binding-posts.
D. Straight copper wire.
E. Coil of copper wire.
F F F. Corks.
G G'. Screws.

Above is a drawing of a rheostat which can be made for a few cents. This is indispensable where there is no arrangement for increasing the current one or two cells at a time. It serves the purpose of increasing and decreasing the current without shock to the patient; it can be attached anywhere in the circuit, and should always be used where a steady current is passed through a sensitive part. All that is necessary to buy is two binding-posts and screws, costing ten cents each. A glass tube can be made of an

ordinary glass syringe, cutting off the end with a file. In one end fit a cork to which should be attached a binding-post, the screw passing through the centre of the cork. To the head of the screw attach a copper wire coiled so as just to fit in the tube. This should be so that it can be removed easily and the tube filled with water, which should be done before each sitting, as the water decomposes rapidly. In the other end of tube, place one or two corks. In one end of a small wooden box cut a hole just large enough to allow the tube to slide easily. At the other end attach a binding-post, and to the screw-head on the inside a straight copper wire to pass through the centres of the corks FF. Now a current of electricity passing through this wire meets the resistance of the column of water, and as the tube is pushed in this resistance grows less, until the wire is in contact with the screw G; the current is then at its maximum intensity. The tube should of course be pulled out before the current is broken.

Society Reports.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday, October 4, 1888.

Dr. T. M. Drysdale in the Chair.

Dr. Theophilus Parvin exhibited a specimen of

Extra-Uterine Pregnancy,

removed by Mr. Tait in the latter part of August. Pregnancy was supposed to have advanced six or seven weeks. Rupture had taken place two days before the operation. The patient was doing well when Dr. Parvin last heard of her condition, four days after the operation. He thought that Mr. Tait was really the most wonderfully expert surgeon in abdominal diseases he had ever seen. In his work no antiseptics are used; perfect cleansing of the hands is accomplished with soap, water, brush and towel; the abdomen is perfectly cleansed; the incision is through the skin and underlying tissues; hæmostatic forceps are used if necessary, but frequently are not required. Forceps are used to take up the tissues as the peritoneum is approached; the peritoneum is raised almost an inch, so that there is no risk of injuring anything beneath the membrane; the peritoneum is then cut into. The moment the incision is made, one or two fingers, or rather the index finger and the thumb, are introduced. In the case just referred to, the diagnosis was not positive, only probable, before opening the abdomen; but as soon as Mr. Tait had introduced his fingers into the abdominal cavity, he said that it was a case of extra-uterine pregnancy with rupture of the tube. Probably five minutes were required to bring up the ruptured cyst and ligate the tube with the Staffordshire knot. After removing the tube and ovary, water was poured in through a funnel to which was attached a rubber tube with a nozzle. The metal nozzle was pushed around in all parts of the abdomen, so as to wash out all of the clots. In this particular case, two pitcherfuls of water were used. A drainage-tube was introduced, and three stitches used to close the abdominal incision. This patient did not have a temperature above 100°, and when seen three days later her recovery seemed almost absolutely certain.

Dr. Parvin exhibited the following instruments:

The Axis-Traction Forceps

of Dr. Stephenson, Professor of Obstetrics in the University of Aberdeen. The forceps closely resembled the Simpson forceps, being only a little longer and the pelvic curve greater. The traction is hooked on in front of the lock after the forceps is applied.

Dr. Wm. Goodell thought that after seeing Stephenson's forceps, he could justly lay claim to all priority in the axis-traction device. Many years ago, in his work at the Preston Retreat, he found that his back so often gave out while making axis-traction with his left hand on the lock of the ordinary forceps, that he sewed a stirrup to the end of a leather strap. The other end of the strap he wound around the forceps handles near the lock, and in the stirrup he placed his foot. He usually hung the strap so near the floor that his heel rested on the latter, the traction force being made merely with the toes or ball of the foot. He thought Dr. Price had probably seen this impromptu device hanging on a gas-fixture in the lying-in room of the Retreat. Of course the woman lay on her back with her nates drawn over the edge of the bed.

Dr. Price remarked that he had seen the device spoken of by Dr. Goodell.

Dr. B. F. Baer read the following report of two cases of

Multilocular Ovarian Cystoma

of unusual size and very rapid growth.

Mrs. X. was sent me by Dr. J. A. Clark, of Bedford, Pa., and on July 31 entered my private hospital. She is 28 years old; married; has had two children after normal labors, the youngest being six years of age. About nine months previous to this date she was attacked with severe pain in the right ovarian region and was confined to bed for several weeks. Her menses had always been regular, but at this time the flow was profuse and continued two weeks. Soon after this attack of pain and metrorrhagia she noticed a swelling in the painful region, on the right side. She rapidly increased in size and began to lose flesh, and occasionally to have attacks of pain and metrorrhagia similar to the one just noted, the flow on several occasions lasting for a month. Her abdomen was enormously distended, especially in the upper portion. It was rather symmetrical, dull on percussion all over the anterior and lateral portion, except in the lumbar regions, where slight resonance was observed. There was fluctuation in the lower part, but in the upper portion it was very obscure. The skin on the lower surface of the abdomen was in a condition of elephantiasis.

Vaginal examination revealed the uterus slightly retroverted, rather mobile, and gave a sound-measurement of three inches. The lower surface of the tumor could just be felt by the vaginal examination. The patient had a very weak pulse, indeed it could not be felt at all at the left wrist, and she had great dyspnœa on the slightest exertion.

Operation was performed on August 2. I was assisted by Drs. J. C. Bowen, G. H. Franklin, J. A. Clark and H. C. Bloom. An incision three inches in length was made in the usual position. The skin at the point of the incision was fully half an inch thick and very vascular, and considerable subcutaneous adipose tissue was present. As soon as the tumor was reached it presented the appearance common to ovarian growths, but it was found to be closely adherent to the abdominal wall. After separating as far as the finger would reach, the tumor was punctured with Tait's large trocar, and about four gallons of greenish fluid drained away; but only the lower portion of the tumor collapsed, the greater and upper portion remained as before. This was punctured in a number of places without removing the instrument from the cavity which had been drained, but nothing followed. The opening in the tumor was now enlarged and the hand introduced; the multilocular condition was broken down, large pieces of semi-solid substance being torn loose from the cavity of the tumor and brought away, together with a great deal of semi-fluid *débris*. As soon as room was gained, the hand was carried outside the tumor, when it was found to be adherent to the liver, stomach and everything with which it came in contact. These adhesions were carefully separated and after considerable effort the remainder of the tumor was finally brought out through the incision, which had been previously increased to 3½ inches. The pedicle, which was found to be thick and quite vascular, was transfixed and ligated, and the tumor cut away. The cavity was irrigated with filtered, boiled water, as much as two gallons being used. The irrigating tube was carried in every direction until the water returned clear. The right ovary was not removed, it being in apparent health. The wound was closed around a drainage-tube. There was considerable shock. The pulse could not be felt at either wrist, and it was two days before it returned, although the patient seemed to be doing well. The usual after-treatment was carried out, and the patient has made an excellent recovery. She went home (two hundred and fifty miles) on the 27th day, and still remains in good health. The temperature never rose above 100°; the drainage-tube was removed on the second day. The tumor was a multilocular cyst and weighed about 90 pounds.

On September 5 I was asked by my friend Dr. R. Armstrong, of Lock Haven, to meet him in consultation over a patient with abdominal tumor, who, he stated, was in such extreme condition that he feared she might not live until my arrival. I saw the patient on September 6. She is 21 years old, and single; puberty had occurred at twelve, and menstruation had always been profuse, coming on every three weeks and always being attended with some pain; she did not consider this abnormal, and so far as she knew was perfectly well up to four months before the above date. In the latter part of April of this year, after unusual exertion about the house, she was suddenly attacked with severe cramp-like pain in the right iliac region, so severe indeed the neighbors were alarmed by her outcries. This attack occurred about the time of her expected menstruation, and continued until the flow followed, when she

gained considerable relief. But she remained ill from that time; she was able to go about, however, in the intervals between the series of attacks of pain of similar character which now followed. Within two weeks after the first attack she noticed that her abdomen was increasing in size in the painful region, and from that time to the time of my visit, just four months, her abdomen had grown to an enormous size. I found her occupying a semi-recumbent posture, and breathing with difficulty. She was emaciated to such a degree, and the tumor was of such size, that she was almost hidden from view beneath it. The surface of the abdomen was purple from interference with the capillary circulation, and the veins were greatly distended. The abdomen was symmetrical and smooth. Fluctuation was rather obscure. There was dulness on percussion all over the anterior and lateral surfaces of the tumor, except at a point far back in the left lumbar region, where slight resonance was found. On the upper right border of the tumor, in the region of the liver, there was an apparently solid mass, shaped somewhat like the liver, suggesting the possibility that the cyst had grown from that organ. This was given more prominence on account of the rapidity of the growth. The patient was unable to retain anything on her stomach, and she had not slept, except at short intervals, for weeks. Her bowels were constipated and the urine was passed frequently and in small quantities. Her pulse was 140 and very feeble. Her expression was an appealing one, and she begged to be relieved.

A tablespoonful of whiskey was given and repeated in two hours, just before the administration of the anæsthetic. I was ably assisted in the operation by Drs. Armstrong, Ball and Watson, of Lock Haven. An incision two inches in length was made. The surface of the cyst was adherent to the peritoneum. After separating the adhesions as far as I could I plunged a large trocar into the tumor. But the contents were semi-solid. I therefore cut through the cyst wall and proceeded to break up and remove the contents. The cyst was adherent to everything it touched—liver, stomach, and other viscera; but the adhesions were weak and in ten minutes' time the tumor was removed, and the pedicle, which was thick and vascular, was ligated. The omentum was so firmly adherent to the cyst that it was ligated and amputated. The friable cyst wall was ruptured in many places and a great deal of the viscid semi-fluid material escaped into the abdominal cavity, but I did not lose time in trying to prevent this. When the tumor was removed what was left of the patient was an exceedingly small portion. The emaciated abdominal walls lay close to the spinal column and sunk into the pelvis. She looked more literally "nothing but skin and bones" than anything I had ever seen before. The abdominal cavity was thoroughly washed out by irrigation through a fountain syringe, and I was careful to pass the nozzle high up among the intestines and under the surface of the liver and diaphragm. The water returned clear and the incision was closed around a drainage-tube, and the patient returned to bed with a better condition of pulse and appearance than she had had before the operation. She did not show any evidence of shock and was conscious almost as soon as she was placed in bed. Her body was so emaciated that it was necessary to pack with cotton about the pelvis and along the spinal column, as the bones almost projected through the skin, and at several places bed-sores were apparent. The right ovary seemed smaller even than its natural size and appeared healthy; it was therefore not removed. The after history of the case has been without event. Her temperature never rose above 100°; it was normal on the third day after the operation. The pulse gradually diminished from 140, and was normal on the fifth day. The drainage-tube was removed within thirty-six hours after the operation. The sutures were removed on the eighth day, when union was found complete, except at the lower portion where the drainage-tube had been, and this has since healed. She began taking solid food on the third day, and on the fourth day her bowels were moved. The tumor weighed about 75 pounds.

The points of considerable interest in these cases are the location, character, and severity of the early symptoms, as well as the location of the tumor when first noticed (on the right side), while the tumors were of the left ovary, the right being perfectly healthy; the large size and very rapid growth of the tumors; the rapid recovery of the patients although in extreme condition, especially in the case last mentioned; the fact that the two cases are alike in nearly all particulars, the only difference being that in the second case the rapidity of the development was much greater, and the severity of the symptoms likewise greater; and lastly the method of removal of the tumor, that is, the breaking up of the semi-solid contents with the hand, thereby permitting their removal through a very short incision. I wish here

especially to call attention to a fatal case which occurred in my practice several months ago, and which forcibly illustrates that there may be danger in introducing the hand for the purpose of breaking down contents of the tumor, not knowing exactly the location of the intestines. In the case referred to, the friable wall of the main cyst had ruptured and some coils of intestine were found to be in the cavity and closely adherent to the more solid portion of the contents. Very careful manipulation was necessary to separate the bowel, which was finally done after considerable time had been spent in the effort. Ordinarily, however, where the cyst has not previously ruptured, the procedure is a safe one when due care is observed.

Dr. M. Price reported a case of

Pyosalpinx with Rupture.

On the sixth of September I was called to Mrs. ——, who had symptoms of miscarriage, with pains, hemorrhage and slight odor to the discharge. She refused to permit an examination, saying she knew she was not pregnant. I left her with the injunction that when she was ready for me to examine her to send for me. On September 10, I was again called, and found her in great pain; the discharge of blood and broken down placenta was of the most offensive character. She stated that she had been perfectly regular up to her last period, which was delayed about one week. She had considerable fever, a temperature of 102°, and had had that morning a severe chill. On examination the uterus was found about four inches in depth, with part of a rotten placenta adherent to its right posterior wall. The uterus was in good position and perfectly movable, with both tubes enlarged and thickened, and at this time could not have been adherent to any surrounding structures. I removed the placenta with considerable difficulty, used intra-uterine irrigation with hot water containing boric acid, which for a time gave her great relief. These irrigations were continued and the uterus washed out twice a day for three days; all this time the tubes continued to enlarge, until they must have contained several ounces of matter, but could have, at this time, been easily removed. The irrigations into the uterus were discontinued and those of the vagina were kept up. I became very much alarmed at her condition and stated to the husband that an operation was needed to save his wife's life. This he refused, and begged that I should do all I could without the operation. I yielded to his request much to my regret, for I felt that nothing but an immediate operation and removal of the tubes would save her life. I believe that any man, treating a case of this kind with the symptoms as positive and the indications for operation as plain as they were in this case, should retire from the case if an operation is refused, for by so doing he clearly indicates that his mind is made up as to the treatment, and by withdrawing shows to the medical attendant who may be called to the case the proper line of treatment; if the latter does not take the warning, the post-mortem will follow and show who was right. There were several well-marked changes in her condition indicating rupture or leakage from the tubal abscess, and her condition steadily grew worse until the 20th, when in consultation with my brother, we persuaded the family and the patient to let me operate and give her that chance for life, as she was in a very bad septic condition. As the consultation was at a very late hour at night, she was opened early the next morning, Sept. 21. I found the internal organs matted together, uterus much enlarged, both tubes enlarged and ruptured, adherent to everything they touched, pelvis full of pus cavities, pus cavities almost up to the kidneys on both sides; everything was in a semi-gangrenous condition. There was little bleeding from ruptured adhesions or from the wound made in opening the abdomen, which is never a good indication. A great quantity of pus was evacuated, at least two pints; it was of the most offensive character. Irrigation and drainage were used. The patient was a very large woman, consequently the longest drainage-tube we could find was used. She rallied from the ether and for the first six hours there were discharged from the drainage-tube two pints of very offensive serum. It gradually lessened in quantity but increased in offensive character. A cleaning of the tube was made every half-hour; after cleaning, warm boracic water was injected through the tube. It improved matters only for the moment. The patient died twelve hours after the operation. Present at the operation: Drs. Joseph Price; E. W. Cushing, of Boston; Atherton, Toronto; Roseburg, Hamilton, Ontario.

Dr. W. H. Parish said that his remarks on this subject of pelvic abscess made at the recent meeting of the American Gynæcological Society had been misquoted. He had stated there, and wished to repeat here,

that these abscesses should be opened very early. If operation were not resorted to, the patient would most probably either die or become a confirmed invalid. He was not one of those who believe that pus always originates in one particular point in the pelvis. He did, however, believe that the large majority of cases occur because of pus primarily in the tube. He believed also that an uncertain number occur from pus originally formed in the areolar tissue, beginning probably because of lymphangitis of that particular locality. The question arises, how best to operate in these cases. He held that there could be no absolute rule of procedure. He believed that in the majority of cases it is wiser to make an opening in the median line and explore the peritoneal cavity, unless we are very certain that the abscess is not in the tube or ovary. If we are sure that there is no involvement of the appendages and that the pus is not intra-peritoneal, the abscess may be opened without going into the cavity. He called attention to a procedure he had adopted in a few instances, where small abscesses were located in pelvic areolar tissue. In one instance Dr. Longaker made an incision in the median line. The tubes and ovaries were found free from pus, but of course congested. With the fingers within the abdomen he felt an abscess in the anterior pelvic wall. An incision was made over Poupart's ligament, as for ligature of the external iliac. Then passing deep into the pelvis, pus was reached some distance below the brim of the pelvis. In another case there was an indurated mass apparent above the left half of the pelvis, not recognizable through the vagina, except on very deep pressure. An incision was made above Poupart's ligament. After cutting through very dense tissue, he came to a minute cavity, which contained no pus, but a somewhat serous fluid containing flakes of lymph. These are only two of a considerable number of pelvic abscesses on which he had operated, and he had never regretted operating early.

Dr. J. M. Baldy wished to take this opportunity of emphasizing views which he had expressed before the recent meeting of the American Gynæcological Society. He did not agree with Dr. Parish as to the pathology of this affection. He granted that there was the possibility of an abscess occurring in the pelvis, such as occurs in other parts of the body from the scalp to the foot, but held that these must be most rare. The gentlemen connected with what Dr. Parvin had been pleased to call "the Philadelphia Dispensary School of Surgery," had now done over one hundred of these operations, and had not yet in a single case come across one which had not begun primarily in the tubes or ovaries. In every case the diseased mass removed has been tube, ovary and other tissues involved. (Dr. Parish, at this point, asked wherein his views differed from those of Dr. Baldy. Dr. Baldy said he would have to leave that to be judged from what Dr. Parish had said.) In regard to treatment he must again dissent from the views expressed. He thought that an absolute rule *could* be laid down. Where pus was found in the pelvis, early or late, the proper procedure was to open the abdominal cavity and remove the seat of the disease, where it was possible; and where it was not possible to remove, proper drainage should be established. However, it would be found comparatively seldom that the disease could not be taken out by a bold operator.

Dr. Joseph Price thought that he understood Dr. Parish. He himself had said repeatedly that we might have an abscess in any part of the body from the scalp to the matrix of the nails; we may have it in the cellular tissue of the pelvis as well as in the axilla or neck; but he must hold to what he had said, that in all the pelvic abscesses that he had seen he had not found one not due primarily to tubal disease. Among the recent papers on the subject, one calls attention to the treatment by drainage through the vagina. He did not see how this would avail much in bilateral accumulations. Half of the tube may be evacuated, but a condition of affairs is left such as is found in an old bubo. In pelvic abscess we have just the condition of affairs which the surgeon is asked to treat in the groin, axilla or popliteal space. In such a case he would remove the disease by a clean enucleation and perfect a cure. He had not seen a case of pelvic abscess which could not be removed in this way, and he should say that such cases did not exist. One gentleman at Washington went so far as to say that after drainage by the vagina in a case of double pyosalpinx, recovery had followed—the woman had borne children. He might as well have said she had conceived, notwithstanding her husband had previously been castrated.

Dr. M. Price remarked that it was doubtful if disease of the tube could be determined by simply looking at it. He remembered a case a few weeks ago, in which the

tube was congested and inflamed. It seemed to be simply swollen, but on pressure there was forced from the fimbriated end a drop or two of as perfect gonorrhœal pus as could be found anywhere. If he had not seen the discharge, he should have thought that there was no disease save congestion.

Dr. W. J. Taylor presented with the following remarks:

Three Uterine Myomata.

These three tumors were removed to-day from a case of considerable interest. The patient, a woman 30 years old, was married on 7th of last May. On the 20th she had her last menstruation and from that time considered herself pregnant. The abdomen began to swell, and she had a good deal of pain. A few days ago she sent for me and I found her with the abdomen much enlarged and presenting the symptoms of pregnancy. On the right side, however, there was a hard mass which puzzled me very much. She was seen by Drs. W. W. Keen and B. C. Hirst and the conclusion was reached that an operation was necessary. To-day abdominal section was made. It was found that the uterus contained a fœtus, and that there were three fibroid tumors: the largest was sub-peritoneal, the smallest was attached by a small pedicle, and the second in size was also sub-peritoneal. These were removed and the patient is at present doing well.

Dr. W. W. Keen said that Dr. Taylor had hardly done himself justice in his modest narration of the steps of the operation and in his reference to the question of diagnosis. "When I saw the patient last Monday it was a question whether the large mass on the right side was a uterine myoma or a tubal pregnancy. It had grown rapidly and *pari passu* with the uterus. Two facts in favor of its being a solid tumor were its density and the fact that the pulsation of the aorta could be distinctly heard with the stethoscope at every point over the tumor. Its rapid growth seemed to be opposed to the idea of myoma. Dr. Hirst was of the opinion that it was a tubal pregnancy, at the same time recognizing an intra-uterine fœtus also. She had albuminuria. When Dr. Taylor opened the abdomen two large tumors presented, which coalesced below but were separated above. Passing the hand into the abdomen the left tube and ovary were found normal. On the right side, it was at first not possible to recognize the ovary and tube, but by enlarging the incision the hand was passed well down and the ovary and tube found. By the side of this tube was a vein considerably larger than my thumb. The pregnant uterus was recognized as the large tumor to the left. It was soft, elastic and dark in color. That to the right was recognized as a neoplasm. While I lifted with difficulty the upper end of the tumor, Dr. Taylor incised its capsule and enucleated it until he came to the attachment to the uterus, which was over a space of three or four inches in diameter, when the weight of the tumor then caused the uterine tissue to tear and the large sinuses began to bleed very freely. I next grasped the pedicle with the thumbs and forefingers of both hands while he stripped off the sac. The tumor was thus quickly removed and the uterine tissue and the wall of the sac were seized with large hæmostatic forceps and the hemorrhage controlled. It was necessary at several points to introduce sutures into the uterine wall itself to control the bleeding. The redundant portion of the sac of the tumor was cut away and the edges brought together with the continuous cat-gut suture. A drainage-tube was passed down into its cavity. In at least two places and possibly four, there were upon the uterine wall small masses about half the size of my little finger nail. These looked like beginning malignant tumors. From the appearance and the rapidity of the growth, I think that this may be a sarcomatous tumor, though it is possibly a simple myoma."

Dr. Parvin thought that there was one point that even Dr. Keen had omitted. He saw the operation and the great mass of the tumor was included between the layers of the right broad ligament, so that the first incision was through the anterior layer of the ligament. Formerly, in removing a sub-peritoneal fibroid from the posterior surface of the uterus, the pedicle partly tore while the ligature was being applied, and there was free hemorrhage. He finally succeeded in stopping the bleeding by the use of the continuous cat-gut suture, after other measures had failed.

Dr. Hirst said that Dr. Keen had correctly expressed his views. The symptoms pointed strongly to extra-uterine pregnancy. If the case had been allowed to go on to term, Cæsarean section would have been required, as the tumor filled up the pelvis. He had looked up this subject of injuries to the pregnant uterus and had found some interesting cases. In one case the woman was thrown to the ground and jumped upon when six months pregnant. The fœtus was

killed but she went on to term. In another case trachelorrhaphy was performed during the second month of pregnancy. This case went on to term. In another instance a number of leeches were applied to the cervix of a pregnant uterus without any interruption to pregnancy. "In a case I had last spring, the woman was squeezed between a bale of goods and the wall and was seriously injured, but she went on to term. A German operator has such confidence in his ability to plunge a trocar into the uterus without doing harm that he advocates the occasional withdrawal by aspiration of the liquid in hydramnios with very great distension of the uterus, allowing the child to go on to term."

Dr. Parish said that the removal of ovarian tumors during pregnancy was recognized as a proper operation, but that the removal of uterine sub-peritoneal fibroid tumors during pregnancy was not regarded as a proper operation except under certain special circumstances. The injury necessarily inflicted on the uterus in their removal is liable to induce abortion. It would be interesting to have the further history of this case. The microscope alone could determine the character of this growth. Under ordinary circumstances the rapidity of the growth would point to sarcoma; but it is well known that in pregnancy fibroid tumors occasionally take on a rapid growth. He supposed that Dr. Hirst did not refer to the cases he had cited as indicating rules of practice. It must be the urgency of the condition which justifies operations on the pregnant uterus. While pregnancy may go on after injuries to the uterus there are numerous unreported cases in which the opposite has been the result. Where a sub-peritoneal tumor can be lifted from the pelvis, pregnancy may go on.

Dr. J. Price thought that obstetrically the case was one of great importance. Some time ago he had called attention to three parallel cases. They all went to term with a pelvic tumor and died undelivered. The question of differential diagnosis scarcely concerned many operators at present; all that was required was the knowledge that there was a tumor present. We should never wait until the patient's general health has been impaired, as this is a departure from that generally followed in general surgery.

Dr. Hoffman had been recently consulted by a woman who stated that she was pregnant and that at previous labors the baby "had to be mashed up." The pelvic cavity was found to be filled with a tumor. She was advised to undergo an operation for its removal, but she refused. It seemed to him that there could be no doubt of the propriety of immediate operation in cases like the one before him.

Dr. B F. Baer believed that, in this case, after the exploratory incision had been made and it was found that no extra-uterine pregnancy existed, it would have been better to have closed the incision than to have removed the deeply located solid tumor; but since the removal was determined upon, he thought it would have been better to have amputated the uterus at the neck, than to have permitted it to remain with a great wound in its side and in the broad ligament. It is not likely that after such a serious operation the pregnancy will go on to term anyway, and abortion occurring within a short time after the operation will certainly add to the risks of the patient. He asked if there were any subjective signs of pregnancy (extra-uterine) in this case, such as the peculiar pains, uterine hemorrhage or discharge of decidua?

Dr. Keen thought that the removal of the uterus would have been a wholly unjustifiable procedure. It was possible that the woman might miscarry, but it was also possible that she would go to term. It has been shown that pregnancy is not necessarily a bar to operation. Not only would the sacrifice of the fœtus have been unjustifiable, but hysterectomy would have made a young married woman sterile. The added dangers of a hysterectomy too might have turned the scale against the patient.

Dr. B. F. Baer said that in regard to the removal of the uterus in this case, it seemed that Dr. Keen condemned the procedure because of his anxiety to save the child. He, however, believed that the child would have had a better chance for its life if nothing had been done. But if operative measures were imperative, then he still held to his former opinion. In answer to a question from Dr. M. Price, he said that he believed that hemorrhage may occur and the extra-uterine sac remain unruptured. He had seen a case which supported that view. The patient after missing her menses for two months, was one day seized with severe pain in the right iliac region, which was followed by shock. She fell in her yard, and when her physician arrived he found a condition of shock as well as hemorrhage. A few weeks after, she had a similar attack. He was then sent for and the diagnosis of extra-uterine pregnancy arrived at. This was five years ago, and Thomas's

method of operating by the vagina and opening the sac was followed. The sac was found with no evidence of rupture in it. The liquor amnii was clear and no evidence of hemorrhage into the cyst, which there would have been had a rupture taken place. The fœtus was, indeed, alive. The patient died on the fifth day after operation.

Dr. Wm. J. Taylor closed the discussion by saying that in this case the tumor was absolutely fixed. The woman's general condition was poor; the pulse 120; the patient unable to eat; she suffered intense pain and diarrhœa for a number of days before the operation. The tumor was also growing rapidly. The urgency of the case seemed to call for some relief. There was albuminuria. If the mother had been allowed to go on to term—provided the woman had lived that long—the risks to both mother and child would have been greater than they are at the present time.

Foreign Correspondence.

LETTER FROM COLOGNE.

(FROM OUR SPECIAL CORRESPONDENT.)

The present century, which has often been named the era of inventions, might with equal propriety be termed the era of exhibitions and conventions. This would be especially true of Germany, for no people in the world exhibit a greater fondness for meetings, social or scientific, than do Germans. The medical profession in Germany has long recognized the great practical advantages and scientific value of frequent and unrestrained meetings. The annual convention of German physicians and naturalists, enjoying by special invitation the hospitality of a different city every year, is justly regarded as one of the most important meetings of German physicians. This year Cologne had the distinction of gathering within its ancient walls eminent medical men from near and far. At this meeting there were present Virchow, the pathologist, archæologist, and politician; Waldeyer, the foremost of German anatomists; Bardenheuer, Binswanger, Lassar, Weissmann, Meynert and a host of other physicians, many of whom are well known in America. Your correspondent counted the number of physicians present at over 800.

Binswanger, of Jena, read an admirable essay on *Crime and Mental Disorders*. The notions of good or bad, of health or disease, the speaker said, are not absolute and cannot be divided by distinct lines of demarcation. The duty of a judge to test carefully the degree of the psychical liberty of a defendant becomes more and more evident. There are doubtless in our prisons persons with imperfectly developed mental capacities, in whom various inhibitory functions are disordered. There exists no doubt an innate and inherited moral defect which, with inexorable necessity, leads to crime. Judge and physician will readily agree in their decision where pronounced lunatic features are manifested by a criminal. But the distinction between a criminal lunatic and a demented criminal is often as difficult as it is important to make. Above all, we have to distinguish between the *occasional* and the *habitual* criminal, for the former is not subject to a permanent inhibitory influence of his mental powers. In this respect it will be necessary to examine in each instance the individual psychical development; in other words, to elucidate the biology of the criminal. There are psychiatrical observers, such as Lombroso and Benedict, who believe that criminal tendencies are present in all persons, and that crime has a direct relation to the development of the brain and skull. But Binswanger emphatically repudiates such views, and ridicules both Lombroso's "criminal skull" and Benedict's "confluent criminal brain." A single symptom is, to the rational physician, never indicative of a certain affection, as it may be produced by various causes.

Virchow's lecture on *Artificial Deformities of the Body* was listened to with unusual interest. He thundered against the baneful influences exerted on the human body by various modern fashions. What is the use, Virchow asked, of introducing the principles and appliances of hygiene into the huts of the poor and ignorant, when the scions of wealth, pretended intelligence, and fashion, especially in the gentler sex, show their contempt of hygiene by their dress and general wearing apparel? In days gone by, the speaker said, I have battled against the diabolical invention called the corset; but this crusade has been given up by me as absolutely futile. The French shoe, with pointed toe and the heel under the middle of the foot, is another fashion which, on account of its detrimental influences on the body, cannot be opposed too energetically. Even the modern stocking, pointed and symmetrical, is injurious to health, as it does not conform to the anatomical formation of the foot. Virchow believes that the modern shoe and stocking, by weakening the toes, invite gouty deposits.

Waldeyer spoke upon *Women and the Study of Medicine*. He objected to the admission of women to the medical profession, and supported his objection by arguments which, however, though skillfully presented, can not all be regarded as sound. A woman, Waldeyer said, is a receptive and not a productive being. The ranks of medical practitioners, however, should consist solely of physicians who are individually able to further the interests and the development of the healing art. A woman cannot produce, and is also deficient in the art of combination. Her sphere is well defined by nature, and only by confining herself to the same may she hope to fulfill her mission and tasks. Experience has proved, he said, that a female medical student, though conscientious and diligent, is, in certain branches, distinctly awkward. In the chemical laboratory she is neither tidy (?) nor sharp, and greatly inconveniences the assistants by perpetual and unnecessary questions. An American woman physician has recently written a book, he said, but, as was to be expected of a woman, the production was a weak one (*sic*). Waldeyer eulogized the great tact and invaluable services of women nurses, but thought that the gentler sex should be admitted to the ranks of practitioners only in exceptional cases.

The exhibition connected with the meeting also presented many features of interest. Special mention should be made of a new inhaler constructed by Jahr, of the Imperial Health Board of Berlin. The advantages of this apparatus are: (1) it secures a more accurate dosage of medicines than has been hitherto feasible; (2) it prevents the condensation of too great quantities of the medicine in the mouth and throat; (3) it insures a longer and more energetic action of the medicine on the upper air-passages. The principle of the apparatus is based on the fact that medicine suspended in vapor which is of a higher temperature than the body is precipitated upon coming in contact with the respiratory passages, on account of the cooling of the vapor which then occurs. Another exhibit of interest was an aseptic pair of scissors. The peculiarity of the scissors consists in the absence of the joint, the scissors consisting of two blades which at the time of being used are easily joined like the two blades of a pair of forceps. The absence of the joint permits complete asepsis of the scissors.

Cologne,
Sept. 30, 1888.

PERISCOPE.

Diuretic Property of Preparations of Mercury.

The diuretic effect of the preparations of mercury has received thorough study from Dr. Władyslaw Bieganski, who communicates a paper on the subject to the *Deutsches Archiv für klinische Medicin*, September, 1888. After referring to a previous paper by Dr. Jendrássik, whose results unfortunately remained inconclusive, he proceeds to give the results obtained in his own cases. The clinical value of the reports of his cases is much increased by the tables, which give the daily record of the medicine taken, the quantity of urine passed, its specific gravity, and remarks upon the condition of the patient resulting from the administration of the calomel. His first patient was a man 54 years old, who 25 years before had had syphilis. In the winter of 1885, he first noticed that his feet were swollen. After trying many domestic remedies in vain, he entered the hospital in August, 1886. It was there found that he had insufficiency of the tricuspid and of the aortic valves, with hypertrophy of the left and dilatation of the right heart. Both pleural cavities contained fluid, the exudate extending up to the eighth rib behind and to the fifth rib in front. There was also ascites and great œdema of the lower extremities. All the visible arteries were hard and tortuous, and the liver was enlarged and hard. Under treatment with calomel, in doses of forty-five grains a day, when necessary given with opium to prevent diarrhœa, the quantity of urine increased, the dyspnœa and œdema diminished, the latter disappearing entirely under the continued use of calomel. When the calomel was stopped, however, the symptoms reappeared, showing that the action of the drug was only temporary.

The second patient was also a man, and 67 years old, and affected for a long time with chronic bronchitis and emphysema of the lungs; he also had dilatation of the right ventricle, œdema, and ascites. Calomel was given as in the previous case, and the œdema disappeared, though more slowly than in the first case.

In the third case, a man 55 years old had chronic bronchitis with emphysema; dilatation of the right ventricle, consecutive insufficiency of the tricuspid valve; œdema and ascites. In this case the calomel failed to induce diuresis. The patient died, and at the autopsy amyloid degeneration of the kidneys was found.

The fourth patient was a young man 30 years old, who was known to have nephritis. There was marked œdema of the lower extremities, ascites, and a feeling of weakness. Calomel was given as in the other cases, but death resulted. No diuresis occurred, but rather a diminution in the quantity of the urine.

Bieganski devotes some time to determining the mode of action of calomel. At the outset he disputes the theory of Jendrássik, who maintained that calomel is absorbed into the blood as an albuminate and leads to a greater sucking up of fluids from the tissues, the fluids being immediately excreted by the kidneys. According to this view, the action of calomel would be like that of the diuretic salines. To determine the mode of action of calomel, Bieganski instituted experiments upon healthy people, employing in two cases calomel; in four inunctions of mercury, sometimes after calomel had been given and stopped, and sometimes from the first; in one case pills of corrosive sublimate, and in three cases injections of mercury, either of the black oxide or of corrosive sublimate.

His general conclusions are: 1. Calomel and other preparations of mercury act as diuretics, the quantity of urine excreted being at times very considerably increased. 2. For a few days after any of the mercurial preparations are given a diminution in the quantity of urine excreted generally occurs; this gives place to diuresis from the second to the tenth day. 3. The diuretic action is manifested best in œdema the result of heart failure. Pathological changes in the kidneys limit or entirely abolish the diuretic action. 4. Diuresis occurs just the same, whatever preparation of mercury and whichever method of prescribing is employed; but it is most marked after hypodermic injection, less after internal administration, and least after inunction. 5. The amount of the preparation is of most importance; small doses are not diuretic, this action being peculiar to moderate-sized and larger doses. 6. The quantity of urine excreted fluctuates, and these fluctuations may amount to twenty-four or thirty-six fluid ounces. The diminution and increase occur pretty uniformly every two days. 7. The diuretic action of mercury depends probably upon the irritation which the mercury during its excretion exercises upon the kidney substance.

In the same number of the *Deutsches Archiv*, Dr. R. Stintzing communicates a paper on clinical observations upon calomel as a diuretic and hydragogue, from Von Ziemssen's clinic. He experimented with calomel upon twenty-seven patients with different affections, and concludes that it is the most energetic of all diuretics. It acts best, he says, in cardiac dropsy, either as the result of valvular lesions or of affections of the heart muscle. This action fails or is unsatisfactory if the insufficiency of the heart has reached the highest degree; but in that case other agents also are ineffective. In dropsy of other causes the calomel treatment is less applicable. In heart disease combined with chronic nephritis, calomel still comes into play if the nephritis is in the background as regards the heart disease. In the obviating of cardiac dropsy with calomel not only the increased diuresis but also the watery stools play an essential *rôle*. The freer the elimination by the former passage the greater the general result. Accompanying effects of the drug—salivation, stomatitis, diarrhœa, colic, etc.—may be checked by appropriate prophylaxis, or kept from doing injury in all cases in which polyuria is obtained. If the diuretic action does not occur, then symptoms of mercurial poisoning always occur. The best dose is that proposed by Jendrássik, three grains three times a day. The administration of it must be continued at least three days, but in special instances may be kept up with good result for twelve days. If the dropsy does not completely disappear, or if it returns, the calomel is to be repeated. Gargles of chlorate of potash should be used from the beginning as a prophylactic against mercurial stomatitis; and the calomel should be combined with opium. One-third of a grain of opium is sufficient generally for three grains of calomel. If stomatitis or severe and persistent diarrhœa occur, the calomel is to be stopped at once. The quantity of urine begins to increase generally from the second or fourth day, rarely on the first or fifth day of the administration of the drug. Polyuria lasts in successful cases at least three days, generally four or five, in rare cases more, up to twelve days. The greatest quantity of urine passed in any of his cases was 8350 cubic centimetres (about nine quarts). Digitalis and other diuretics act as diuretics less powerfully than calomel; but calomel cannot substitute them, for it is no cardiant.

—In the *Lancet*, October 13, 1888, Mr. Frederick Treves reports a case of intestinal obstruction due to a very rare cause—hernia into the foramen of Winslow.

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CHARLES W. DULLES, M.D., EDITOR.

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Write in ink.
Write on one side of paper only.
Write on paper large letter size.
Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate, or omit words like "the," and "a," or "an."
Make communications as short as possible.
NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

RECOVERY FROM HYDROPHOBIA.

A pleasing variation from the usual reports of cases of hydrophobia comes, under date of September 24, from St. Louis. According to the newspaper reports, a boy, fourteen years old, had developed what are often considered to be the symptoms of hydrophobia. He is said to have barked and frothed at the mouth, and to have gnawed at the carpets and chairs. Physicians being summoned to his assistance, it is said that they confirmed the popular diagnosis of hydrophobia, and instituted the customary plan of treatment, the boy being held by strong men and fastened to his bed, and the usual prognosis of death being given. In this case, however, fortunately for the lad, he disappointed the expectations of those who watched over him, and after a short period of unconsciousness, during which he was probably free from the kindly but unwise ministrations to which he had been previously subjected, he revived, and manifested no further symptoms of this dread disorder.

The evidence that this boy had genuine hydrophobia is not to be dismissed as entirely unworthy of belief; for the reason that it is quite as complete and quite as well authenticated as in the great majority of cases in which death follows instead of recovery. It is true the amount of evidence is not very great to the scientific mind, but it would be sufficient, we think, to convince Monsieur Pasteur, if we are to judge by the history of some of the cases to which he has applied his method of preventive inoculations.

The most suggestive part of this story, in our opinion, is that which states that the boy's recovery followed promptly upon the period in which he was not subject to any medicinal or mechanical treatment. And, to be entirely serious, we believe that this, which is in accord with some of the most scientific observations on the treatment of tetanus in horses, indicates in the present state of knowledge—as opposed to prejudice—in regard to hydrophobia, a part of the treatment which, whatever else may be done, is absolutely essential to the proper management of these trying and terrible cases.

THE ABUSE OF CHEMICAL ANALYSIS.

The rapid multiplication of real or pretended chemical analysts of late years, and the keen competition of manufacturers of pharmaceutical and food preparations, have brought about a state of affairs which may prove somewhat perplexing to the medical practitioner who desires to advise his patients intelligently in regard to their medicines, their foods—and, perhaps, their drinks. It has become the fashion to spread before him what purport to be exact statements as to the ingredients of various articles recommended to his notice—a fashion which is to be commended whenever it is honestly

followed, and which, under these circumstances, brings the manufacturer into the best possible relation to the practitioner of medicine. But, unfortunately, what might, if rightly used, be of the greatest service to physicians has proved so powerful an assistant to commercial ventures that it has come to be abused and prostituted to utterly unworthy purposes. Thus, the advertising pages of medical journals, and, in some regrettable cases, their reading pages, often present reports of so-called analyses which have been framed, not to instruct but to deceive those to whom they were addressed. On the other hand, honest and faithful analyses have been garbled, or parts of them have been picked out and used to advertise articles which the analysts themselves had no idea of recommending.

Examples of this practice have been furnished of late in different parts of the United States. In this city a well-known chemist has recently found it necessary to disclaim responsibility for the way in which his report as to the presence or absence of salicylic acid in certain specimens of beer has been used by the manufacturer of one of them as a certificate of its absolute purity. In other cities we have had flagrant examples of analyses which seemed to show that articles suspected or asserted to contain dangerous ingredients were free from them; and analytical testimonials to the worth of medical and sanitary preparations seem to have become in some places a regular article of commerce.

For these reasons chemical analyses have lost the credit which they once had, and which they ought to have, with physicians. But, besides this, they have proved injurious in some cases to the manufacturers themselves; for, with the advent of reports which misrepresented certain medicinal and food preparations in the interests of those who sold them, there have come reports which misrepresented them quite against these interests. A recent example of this is found in the history of a much-used food-preparation, the manufacturers of which have been prompted to collect and publish evidence to show that a chemist whose name is familiar to all readers of the advertisements in medical journals has made a report in regard to the ingredients of this food which is marked by prejudice or stupidity.

Some of this evidence has been published in certain medical journals which had before given publicity to the adverse report, and its absence from the columns of the Reporter is due only to the fact that we have not admitted anything to them which seemed to bear plainly the mark of commercial controversy. The inflexible rule of the Reporter is to restrict advertisers to the advertising pages; and, as we have steadily refused to publish in our reading pages laudatory notices of commercial articles, neither will we admit to them criticisms prompted solely by business competition. When actual fraud has been proved, or when it has been shown to be highly probable, we have not hesitated to express our opinion; but we have not taken part in controversies about commercial preparations for any less serious cause.

In regard to much that passes for chemical analysis we feel that our knowledge is not sufficient to enable us to give a judicial opinion; and, until we feel more confidence than we do now in our judgment on such matters, we must confine those who contest about them to our advertising pages, and restrict our own utterances to such general statements of principle as may aid the readers of the Reporter in arriving at just conclusions.

At present our purpose is to call attention to the abuse of chemical analysis which is bringing discredit upon a method of advertisement which might be of the greatest service to our fellow-practitioners, and of the greatest advantage to honest manufacturers. The first step toward the correction of this abuse is to point it out; and we trust the succeeding steps will appear before long.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

THEINE IN THE TREATMENT OF NEURALGIA. By Thomas J. Mays, M D., Professor of Diseases of the Chest in the Philadelphia Polyclinic, etc. 16mo, pp. 84. Philadelphia: P. Blakiston, Son & Co., 1888. Price, 50 cents.

This little book contains an essay on Theine already published in the *Polyclinic* during the latter part of 1887 and the beginning of 1888. Dr. Mays has made a very thorough study of this drug, both physiologically and therapeutically, and has demonstrated its value as a remedial agent in the treatment of various forms of neuralgia. It is our impression that the results of his study are not as well known as they ought to be, and we strongly recommend our readers to get a copy of this cheap and valuable monograph, and learn what theine actually is and what service it may render them in their practice.

CORRECTION.

By an error in the review of Dr. Howe's book on "Excessive Venery, Masturbation, and Continence" (Reporter, Sept. 29, p. 413), the publishers were stated to be J. H Vail & Co., instead of E. B. Treat, New York.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

The Therapeutics of Diphtheria. By A. Jacobi, M D., New York. From the *Transactions of the Philadelphia County Medical Society*, May 23, 1888. 23 pages.

Conservatism in Gynæcology. By A. Reeves Jackson, M.D., Chicago, Ill. From the Chicago *Journal and Examiner*. 7 pages.

The Early Diagnosis of Spinal Caries, With Remarks on Treatment. By Hunter P. Cooper, M.D., Atlanta, Ga. From the *Atlanta Medical and Surgical Journal*. 10 pages.

The Treatment of Hemorrhoids. By Hunter P. Cooper, M.D., Atlanta, Ga. 9 pages.

Some Retrospective and Prospective Thoughts on Surgery. By Donald Maclean, M.D., Detroit, Mich. From the *Journal of the American Medical Association*, June 30, 1888. 33 pages.

Criminal Abortion, or Fœticide. By H. C. Ghent, M D , Belton, Texas. From the *Transactions of the Texas State Medical Association*, 1888. 28 pages.

Relation of Diseases of the Kidney, especially Bright's Disease, to Diseases of the Heart. By J. M. DaCosta, M.D., Philadelphia. From the *Medical News*, May 5, 1888. 37 pages.

—As the whole of Dr. Jacobi's paper was laid before the readers of the Reporter in our issues of June 23 and 30, 1888, it is not necessary to speak in detail of this reprint. But we can recommend its careful perusal to all who have not already read it in the pages of this journal, as the expression of the opinions of one who is justly celebrated for his study of this interesting subject.

—The substance of this pamphlet was published in the Reporter, June 9, 1888, in our report of the proceedings of the Illinois State Medical Society in May of this year. It contains a strong protest against the too frequent performance of abdominal section upon women, and denounces those whom the author suspects of operating more for their own glory than for the good of their patients, in most unqualified terms.

—Dr. Cooper's paper is chiefly devoted to emphasizing the importance of an early diagnosis of Pott's disease, and describing the way in which this diagnosis is to be made. This part of his paper is both interesting and instructive, while the part devoted to describing the treatment of caries of the spine is as brief as it is clear. Dr. Cooper recommends the use of the plaster-of-Paris jacket as "the easiest, cheapest and best treatment in the vast majority of cases."

—In this paper, which was read before the Medical Association of Georgia, April, 1888, Dr. Cooper very sensibly remarks that "a surgeon in general practice will obtain far better results if he thoroughly familiarizes himself with the details of two or three operations than he will by attempting to perform all of the dozen or more which have been recommended." His pamphlet contains a brief and succinct account of the different varieties of hemorrhoids, and describes three methods of operating for their relief: dilatation of the anus, injection of carbolic acid, and the ligature. The opinions of Dr. Cooper are the more interesting, in that his experience leads him to dissent from some of the views expressed by other surgeons. His paper is so instructive that it may well be recommended to the attention of our readers.

—Among the interesting features of Dr. Maclean's address before the Surgical Section, at the last meeting of the American Medical Association, is his defense of chloroform as an anæsthetic, which he has employed for thirty years, without an accident which could in any way be attributed to its use. His whole address covers a number of points of great importance in the practice of surgery, and is of the greatest value as expressing the mature opinions of a surgeon of unusual skill and judgment.

—Dr. Ghent has taken the pains to collect the opinions of a number of well-known medical men in regard to the frequency of criminal abortion in the United States, its causes, and the means for its prevention. To these are added, in the pamphlet before us, his own views as to the enormity of this crime and the duty of the medical profession in regard to it. As might be expected, he lays the greatest stress upon the right of the fœtus to life and care, and urges his professional brethren to use their best endeavors to promote correct views in regard to this matter among the persons who come under their influence.

—Dr. DaCosta's Middleton Goldsmith Lecture, delivered before the New York Pathological Society, April 18, 1888, contains a learned defense of his opinion that the "cardiac hypertrophy which is found in Bright's disease is not in any sense the consequence of that disease," and that it is in the nervous system that we must search for the original source of the malady, which includes both heart and kidney in its ravages. The vast experience and careful investigations of Dr. DaCosta lend great weight to anything he says, and his views on the important subject discussed in this address deserve the most careful attention of all pathologists and practising physicians.

CORRESPONDENCE.

A Statement from Dr. Willard H. Morse.

TO THE EDITOR.

Sir: I ask the favor of being permitted to answer with my side of the story, the editorial which appeared in your last issue concerning myself.

Although I am but a young country physician, in indifferent health, and without the facilities at the hands of many others, I have, during the eight years since my graduation from the Albany Medical College, engaged more or less largely in the study of new remedies, and in practical chemical work. It is true that instead of a large botanical garden, I have only a little plot of land, and instead of an extensive laboratory, only an office room with the necessary working apparatus. But I have worked as I could, writing the treatise "*New Therapeutical Agents*" (1882), and some sixty papers for the medical press. I do not boast of this, or of chemical labors, as what I have done speaks for itself.

You will remember that in the REPORTER for Nov. 26, 1887, I had a paper on "Gleditschine," which I think had a little to do with the exposure of that "alkaloid." At least it brought me a deal of prestige; and last spring, in looking for another like "foe to conquer," I had my attention attracted to the Scotch Oats Essence, which the *Druggists Circular* and Boston *Journal of Health* had stated to be base with opium and alcohol. It occurred to me that it would be a good idea to analyze the preparation and expose its character a little more fully than had been done. But on examining the bottle obtained for the purpose, I was surprised to find that it did not contain opium, although there was some alcohol present. I thought this strange, and proceeded to investigate the source of the charge. Finding the *Journal of Health* to be anonymously edited, and with its "chemist" acting under an assumed name, I concluded that the source was hardly creditable, and stated my findings (May 1). Soon after, I was advised by Dr. R. G. Eccles, now president of the State Pharmaceutical Society, and others, that I must have examined a bottle put out since April 18, since which time it was alleged that the preparation had been changed in quality, and the opium left out. This fact was not known to me, and I took immediate opportunity to purchase bottles of both the "guaranteed" and "non-guaranteed" articles, and to conduct a careful examination of both, according to advice of Dr. Eccles, and by a method of his prescription. The result was that I found that it was the "guaranteed" article which I had first examined. On May 31, I wrote Dr. Eccles as follows:

"*The results in corroboration show that the bottle first examined must have been one bearing the forfeit label.*"

Shortly afterward I wrote an article on the matter, but for reasons not deemed judicious, it was not published.

The *Druggists Circular* seems to have come to the conclusion—and a very natural one, too—that I was retained by, or interested in the Essence, in some way; and forthwith began its attack. On learning this, I addressed the editors the statement given above, and sent it to them through my pastor, Rev. J. A. Owen. To it I added—and I reiterate it now—that I have never met anyone connected with the manufacture of the preparation, and that my action was wholly voluntary, and uninfluenced by such parties. The outcome had meanwhile transpired.

The work done as a therapeutist had brought my name before the public, so that I have gradually come to do considerable work as a chemist. My reports I have sought to make thorough and careful; and to this end I have sent a copy to the manufacturer that he might suggest any corrections, other than chemical. As my reports are sometimes used for advertising purposes, it has been my custom sometimes to state that the copy can be retained for $10, if desired, thus avoiding needless correspondence.

On May 5, I think, I had occasion to examine Laviolette's "Oil of Florida Water," to find whether his claim that it "makes a water equal to Murray & Lauman's," was tenable. On July 5, after careful research, I certified in favor of the claim, and sent Laviolette a copy. He returned answer that he thought my report might have "made a better showing." In answer I invited his advice, and soon after, he sent me his "special sample" (so styled by him). This sample was unsolicited. On opening it, I remarked its peculiar smell, but while exhibiting the vial to my wife, it was accidentally broken. A few drops which remained I found to be Oil of Bay, an article which Laviolette stated in court, "*anyone* could distinguish from Oil of Florida Water." My first estimate

being thorough, and considering that the man merely wanted something more elaborately worded, I, that same night, wrote out a second report. No statement was made that the report was on the second sample; for in the first place anyone knows that an "elaborate" analysis cannot be made in five hours; in the second place, having been thorough at first, I could not subsequently be more so; and in the third place, I inferred that a mistake had been made, and the wrong oil sent me. If my first report had not seemed to him "full" enough, he should have instructed me to obtain another bottle in the open market, and not have sought to make me amenable to law by certifying supplementarily on a proffered sample. This alone was enough to arouse suspicions of the man's purpose, but I did not expect that he would think anyone (even a barber) such a fool as not to be able to distinguish the two oils, the one from the other! The trial developed the fact that the *Druggists Circular* had instigated the whole proceeding. The hearing also showed that though a strong attempt was made to get me to commit a crime, there was not evidence enough to show that it was committed.

In writing you to ask that you state the matter, I quoted you the statement of the *Tribune* to the effect that the prosecutors were satisfied as to the justice of the acquittal, a statement which I supposed veracious, as coming from such a paper.

I may be something of a "crank," but at the same time I profess to be a chemist and therapeutist. I deny most emphatically having ever certified by "influence," or to that which research would not bear out. I have worked for eight years, without pretensions, with care, and in love with my work; and (D. V.) I shall continue my labors in my humble way, and according to the best of my ability. I feel no shame, and have no compunctions of conscience. I regret that I have to ask to occupy so much of your space; and thanking you for your past confidence in me, I trust to be able to merit its continuance.

WILLARD H. MORSE, M.D.

Westfield, N. J.,
Oct. 16, 1888.

[We think it only fair to permit Dr. Morse to reply in our columns to the comments on his case published in our issue of October 13. We have nothing to add to what we have said, and what he now says, except that we have no pleasure in expressing censure, and that we sincerely hope he may merit and secure the good opinion of right-minded men.—Editor of the REPORTER.]

Electrolysis for Stricture of the Urethra; Death.

TO THE EDITOR.

Sir: I have had a case of suppression of urine and death following electrolysis for stricture, which I wish to report. The case so closely resembled an attack of pernicious ague—"sinking chills"—that I would like to hear comments upon it from yourself or some of your readers.

On the 20th of August, 1888, I saw the patient in consultation with a physician of a neighboring town. The patient was 56 years old, a cattle-breeder and importer doing an extensive business. Ten years ago he contracted an inflammation of the urethra, whether specific or not those of us who saw and treated it were undecided. The canal had a dry, red appearance, with very little if any suppuration. It would readily yield to treatment and apparently get well. But a glass or two of beer or whiskey, or any over-exertion, would start it up again.

It did not seem to be communicable. His business required much traveling, and he was treated for it in various parts of this country and Europe, always by the best practitioners obtainable under the circumstances, he never trusting himself in the hands of the so-called specialist who infests all our larger cities. After six or seven years he noticed that his stream of urine was becoming smaller. While in the mountains of the West last summer the symptoms of stricture became very annoying.

I found the meatus corresponding to No. 5 American scale, with the normal urethra behind it measuring 15. The meatus was incised and a No. 12 sound was passed, and encountered a stricture just behind the bulb. The patient showing signs of shock, no attempt was made to pass a sound any farther. It was agreed that his attendant should keep the meatus patulous by passing through it a test-tube, No. 15 in size, and when the incision was sufficiently healed send him to my office for electrolysis.

On the 31st of August he presented himself, saying that he had had the ague on the 29th—two days before. I found that a No. 2 Tiemann bulbous rubber bougie was the largest that could be passed into the bladder. Using my smaller olive, a No. 11 English, it was passed down to the stricture and connected with 12 Law cells, which were slowly increased to 20. (They were not very active, not having been charged for 2 years.) The bougie passed through this stricture in seven minutes, encountering another three-quarters of an inch beyond.

The latter was passed in the same length of time. The olive was then withdrawn above the first, and passed through them again, taking four minutes' time. Shock was very slight, only a little pallor; the pain was insignificant.

He left my office immediately and rode twenty-four miles on a train, feeling no inconvenience except scalding on urinating. After attending to some business, instead of staying in town as he was expected to, he mounted a road-cart to ride three miles into the country. While on the road he was taken with a very severe chill and sudden prostration. When his physician reached him he had the appearance of profound shock: vomiting, cold extremities, clammy perspiration, pulse scarcely perceptible and only forty per minute. He passed two ounces of bloody urine. By energetic treatment a partial reaction was brought about. The temperature in the mouth for a short time was above normal, but did not remain so more than an hour.

I saw him at 5 P. M. Sept. 1. His temperature was then 96°; pulse 84, very weak, and easily compressed. Respiration 24 and jerky. The stomach was irritable, the bowels constipated. He was given strychnia, strophanthus, atropia and whiskey hypodermically; whiskey, digitalis, tincture of cantharidis, sulphate of quinine, in a pint of hot water by the rectum. The latter was repeated five or six times in fifteen hours. The hot water was all retained and apparently absorbed. Calomel and bismuth were given by the mouth. Dry cups were placed over the kidneys and artificial heat applied. Nothing, however, did any good. He gradually sank and died at 4 P. M. Sept. 2. Two hours before death a catheter was introduced and half an ounce of bloody urine withdrawn.

Now, how much did the electrolysis have to do with the fatal result? The case closely resembled in its symptoms the "congestive chills" we used to encounter in this vicinity over thirty years ago.

A. Ady, M.D.

Muscatine, Iowa,
Sept. 20, 1888.

—Dr. J. J. Leppa, says the *Medical Record*, October 20, 1888, has been sued for malpractice by an Italian woman to whose son he had given chloroform and ether for eclampsia. The anæsthetics controlled the convulsions, but the boy died.

Notes and Comments.

Antipyrine in the Pain of Dysmenorrhœa.

Dr. Windelschmid states in the *Allgemeine med. Central-Zeitung*, No. 53, 1888, that the sedative action of this agent has given brilliant results in the pain of dysmenorrhœa. He prescribes it in doses of 30 grains in clyster before and during menstruation. Generally its action was manifest after one-quarter of an hour, but in one case it had to be repeated in twelve hours. Its action was strikingly favorable, especially in two cases, in which all the resources of gynecology, both external and internal, had been exhausted in vain. These patients for eight days, before and during the period, suffered with violent pains and cramps. Clysters were used in the morning and evening, and in the following evening. Generally the analgesic action, even in children, was associated with a narcotic effect. Disagreeable complications, with the exception of profuse sweats and often slight retention of urine, were not observed. A glass of wine or beer was often given to prevent collapse. Urticaria was observed in the case of a boy seven years old, who had been given four and one-half grains of antipyrine by the mouth. It was accompanied with high fever, and lasted about twelve hours.

Union by First Intention of Wounds Exposed to the Air.

A correspondent of the *Medical Press and Circular*, August 1, 1888, reports from Paris that M. Léon le Fort had recently attacked the method of Lister, which he taxed with exaggeration. According to the English surgeon, the air contained germs which excited suppuration, and in order to destroy these ferments, phenic acid was used under every conceivable form. Reunion by first intention was sought, in order to prevent the suppuration. His doctrine (M. le Fort's) attributes no evil influence to the air in the propagation of purulent infection, but to the fingers, instruments, and sponges used in operations. He applied himself to prove that air was innocuous, and for that purpose left all his wounds from operations, some of which were major, exposed to the air during the whole course of the operation and for some time afterward. Reunion by first intention always took place, and without suppuration.

Formulæ for Creasote.

Dr. Keferstein gives some formulæ in the *Therapeutische Monatshefte*, September, 1888, which have proved useful in his practice. The following formula, he says, gives a clear mixture which tastes and smells decidedly better, and is also cheaper, than the formula suggested by Bouchardat, which contains Malaga wine:

℞ Creasoti . . . . . ♏xx
Spir. vini rectificat. . . . . f℥ vi½
Aq. cinnamomi . . . . . f℥ iiiss
Syr. cinnamomi . . . . . f℥ vi½
M. Sig. A tablespoonful three times a day, increasing one tablespoonful weekly.

The following formula is for administration of the creasote in pill-form:

℞ Creasote . . . . . ℥i
Powd. althea root . . . . . ℥iss
Licorice juice . . . . . f℥iss
Mucilage of acacia, q. s. ut fiant pil. No. 120; coat with gelatine.
Sig. Six pills three times a day.

When there is much cough and diarrhœa, the following may be given:

℞ Creasote . . . . . gr. xv
Acetate of lead,
Opium (pure) . . . . . āā gr. ivss
Licorice juice . . . . . f℥iss
Mucilage of acacia, q. s. ut fiant pil. No. 50.
Sig. Five pills three times a day.

Five pills contain one and one-half minims of creasote.

Instead of giving the creasote in cod-liver oil, Keferstein has the following emulsion made, which can be taken even by children:

℞ Creasoti . . . . . ♏xx
Solve in
Olei amygdalæ . . . . . f℥viiss
Pulv. acaciæ . . . . . ℥v
Aq. destil. . . . . f℥iiiss
M. ft. emulsio. Adde
Tinct. aurant. comp. . . . . ♏xv
Elæosach. menth. pip. . . . . f℥i
M. Sig. A tablespoonful from two to five times a day.

In the case of children it will be sufficient to make up half the quantity, and give a teaspoonful of it at a time. One tablespoonful of this emulsion contains one and one-half minims of creasote. If the taste of oil is detected, black coffee may be given after it.

The following formula is suitable for giving creasote in the form of drops:

℞ Creasoti . . . . . ♏xl
Tinct. cinnamomi . . . . . f℥viiss
M. Sig. Fifty drops three times a day, or one-half teaspoonful in a cup of warm milk, added while the milk is vigorously stirred.

Twenty-five drops of this mixture contain one and one-half minims of creasote. Instead of milk, wine or warm sugar and water may be used; but if alcoholic fluids are used they should be cold, while if non-alcoholic fluids are used—the best of which are mucilaginous—they should be warm. —*Wiener med. Presse*, September 30, 1888.

Antipyrine in Chordee.

Archibald Dixon, of Henderson, Ky., writes to the *Weekly Med. Review*, July 4, 1888, that he has found antipyrine of use in chordee. Given in doses of fifteen to twenty grains, in a wineglassful of water, just before retiring, he says it has effectually relieved all symptoms in three cases. In only one case was it necessary to repeat the dose during the night. He suggests for it a further trial.

Lectures at the Polyclinic.

The second annual series (Part I) of Evening Lectures on Practical Subjects will be given by the Faculty of the Philadelphia Polyclinic, at the College Building, Broad and Lombard Streets, free to members of the profession and medical students, and in the following order. The lectures begin at 8 o'clock.

Oct. 23, Prof. Henry Leffmann: "The Recognition of Poisoning."

Oct. 30 and Nov. 6, Prof. Thos. J. Mays: "Pulmonary Consumption considered as a Neurosis."

Nov. 13, Prof. Charles K. Mills: "Visual Localization."

Nov. 20, Prof. J. Henry C. Simes: "Pseudo-Sexual Disorders."

Nov. 27, Prof. S. Solis-Cohen: "The Management of Fever, with Especial Reference to High Temperature."

Dec. 4, Prof. H. Augustus Wilson: "The Preparation and Application of the Plaster-of-Paris Bandage."

Dec. 11, Prof. John B. Roberts: "Treatment of Leg Ulcers."

Dec. 18, Prof. Edward Jackson: "Failure of Sight in Old People."

Jan. 8, Prof. Chas. H. Burnett: "Some Common Causes of Deafness: Prevention and Cure of the Disease."

Jan. 15, Prof. Alexander W. MacCoy: "Observations on Certain Forms of Hoarseness."

Jan. 22 and 29, Prof. Benjamin F. Baer: "Pelvic Inflammation: Its Causes, Complications and Treatment."

Part II will be announced hereafter.

NEWS.

—The quarantine station for Philadelphia will be closed Oct. 31.

—Professor G. Ruge, of Heidelberg, has been appointed Professor of Anatomy.

—Diphtheria is epidemic in Athens, Ohio. The public schools have been closed on account of it.

—Bellevue Hospital, New York, is to have a chapel and library. The new building is now going up.

—Dr. Ferdinand E. Chatard, of Baltimore, died October 18, 1888. He was graduated from the University of Maryland in 1861.

—In a communication in the *N. Y. Medical Journal*, October 20, 1888, Dr. F. Whitehill Hinkel reports upon the use of antipyrine in acute coryza, frequent bleeding from the nose, and in hay fever.

—The *Engineering and Building Record*, October 20, 1888, protests against the pollution by sewage of the Passaic River water which is supplied to Jersey City, and declares that the water is likely to grow worse instead of better.

—The Trustees of the Hoagland Laboratory, Brooklyn, N. Y., announce that it is now open for students who desire to make original researches. Instruction in Bacteriology will be given during the winter and spring by Dr. George M. Sternberg and Dr. George T. Kemp. The fee is fifteen dollars, "which will entitle the subscriber to prosecute his studies until June 1, 1889, during as many hours of the day as he may desire."

—The *New York Sun* says: If doctors' signs are any indication of disease, the new West Side must be one of the unhealthiest parts of the city. There is a doctor's sign on every large apartment building, and they average about one sign to every five or ten private houses. The real secret of their frequency is not that there is business in that part of the city for all the doctors or for one-quarter of them, but that the recent rapid development of that section has led scores of young doctors to go there to grow up with the community in the hope of some day getting together practice enough to live. About one in a dozen of the earliest comers really did find a practice growing up around him, and a few of the West Side doctors therefore are getting rich fast, but for the rest they come, stay a few months, or as long as their capital lasts, waiting for the practice that never comes, and then they drift away; but other raw recruits from the colleges take their places and more, so that while the signs change too frequently for the neighbors to keep track of them, their number never decreases.

HUMOR.

He had Both Kinds.—Old lady (to druggist's boy)—"I want to git a leetle paint, boy." Boy—"Yes'um; face or fence?"—*Life.*

Friend (to Congressman's wife)—"Is your husband a man of sedentary habits?" Wife—"Of course not. He hasn't touched a drop in 15 years."—*Washington Hatchet.*

Should you upset a bottle of castor oil on the carpet the best treatment for removing the spot is to place the bed over it. This is both cheap and efficacious.—*Ledger.*

Terribly Broken.—"And are you really so badly broke, my friend?" he said, as he tendered the tramp a penny. "Broke?" was the bitter response. "I'm as badly broke as the Ten Commandments."—*Life.*

Invalid—"I have been here at these springs, doctor, six weeks, and I don't see that the water has had the slightest effect." Dr. Candid—"You must have patience. There was a man here last season who didn't die until after he had been here two months."—*Texas Siftings.*

A Wise Precaution.—Brown—"What have you got in the bottle, Robinson?" Robinson—"Ether." Brown—"What are you going to do with ether?" Robinson—"That big duffer Jones has threatened to whip me on sight; and as soon as I see him coming, I'm going to take it. I don't propose to suffer if I can help it."—*Puck.*

OBITUARY.

JOSEPH WARRINGTON, M.D.

Dr. Joseph Warrington, whose death was announced in the Reporter Oct. 20, died at Moorestown, N. J., at the advanced age of eighty-three years. He was a famous physician years ago before he gave up active work. He was graduated from the University of Pennsylvania in 1828, and began the practice of medicine in Pennsylvania, continuing in practice until 1854, when he retired to his farm near Moorestown. He was one of the founders of the Philadelphia County Medical Society and the State Medical Society of Pennsylvania, and of the Philadelphia Lying-in Charity.

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COMMUNICATIONS.

A NEW STYLE OF BI-FOCAL LENSES.

BY GEORGE M. GOULD, M.D.,
PHILADELPHIA.

The adjustment of spectacles to a presbyopic person who also requires a different lens for distant vision, is always attended with vexation to both physician and patient. One thing that renders it peculiarly difficult is that the problem is different for every patient. Women as a rule look at the matter from a standpoint quite different from that taken by men; and among the latter, as well as among the former, the peculiar habits, business, disposition, and other personal peculiarities always have to be considered. In all cases the first question to be settled is whether or not two distinct pairs of spectacles (or nose-glasses) will prove more satisfactory than a single frame with bi-focal or Franklin lenses. If the patient is a woman this question speedily resolves itself into one of personal appearance, and it is highly important to recognize this fact. The belief is yet widely prevalent that spectacles are a sign of on-coming age, and they are therefore frankly and thoroughly hated by many who desire to keep the unpleasant subject from intruding itself.

> "Though the coming on of crows-feet
> And the turning back of beaux' feet"

are evident facts, many women will endure headaches and imperfect vision, and even forego reading, rather than wear glasses of any kind, least of all, spectacles. As a consequence, the question, paltry at first sight, has a medical and serious bearing. If, therefore, it become apparent that spectacles are held to be another sign of the odious ravages of years, it may be best to drop the subject as deftly and promptly as possible. But in some instances we must not give way before strongly and clearly stating the probable consequences. Where the occupation of the patient demands frequent and continuous changes from near-work to distant vision, and *vice versâ*, then, if possible, vanity should be overcome. For example, in the case of a school-teacher, it is in the highest degree vexatious for her to change glasses every time she has to look from book to scholar, or to the blackboard. There are also certain kinds of clerical work, and certain professional occupations and artistic employments which follow the same rule. Sometimes spectacles may be accepted for the more continuous, or the more private work, whilst nose-glasses or lorgnettes are used for the drawing-room and the street. I have known as many as three or even four different styles of glasses to be used at appropriate times by one person. It is at once amusing and pathetic to see a woman with a low, flat, nasal bridge, pretending to be successful in her struggles to give her aristocratic *pince-nez* a firm hold. But in the more resigned, in those of whom old age has taken clear possession, either *vi et armis*, or with placid welcome, the trouble of changing glasses makes it easy to show the advantage of the Franklins. For such, and for most men, the bi-focal lenses are certainly to be advised.

There are three styles of bi-focal lenses: the first is the well-known and time-honored one invented and worn by that ingenious and wise philosopher, after whom all bi-focal lenses should be named. This consists in two centred lenses, the dis-

tance lens above, the reading below, the straight line of their junction being horizontal through the centre of the frame. This is shown in Fig. I. The objection to this is its unsightliness, the line being very conspicuous. Lesser objections also were, that no distant vision downward was possible, and the spectacle must be rimmed. To obviate the unsightly line of junction,

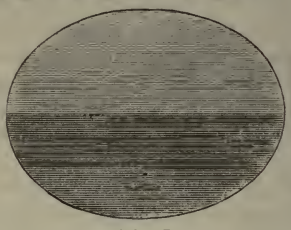

Fig. I.

(*The line of junction is not so conspicuous here as in the spectacles*).

there has been largely used a lens ground from a single and solid piece of glass, the lower or reading lens being crescent-shaped with its concave aspect up, and filling the greater part of the whole space. See Fig. II. Vanity was wholly responsible for this absurd invention, the objections to it being striking and numerous. A glimpse of the ground near the feet was entirely impossible, as much and even more so than in the older style. Moreover, lateral vision was cut off by the horns of the crescent, and the field of vision for distance, which it is desirable to have as large as possible, was reduced to a narrow space, with the valuable sides and inferior angles wasted. To emphasize the absurdity of the whole, the unavoidable prismatic effects of the lenses thus made

Fig. II.

rendered them so uncomfortable that many could not endure them. Yet another aspect of this question is decidedly medical, or to speak more accurately, surgical. The inability to see plainly the inequalities of the ground near the feet, or the steps of the stairs, etc., frequently resulted in missteps and falls, or at least kept the patient hampered and groping in his walking.

About three months ago I conceived the plan of reversing the position of the crescentic or semi-circular near-lens so that the bulk of the whole lens would be kept for distant vision. The plan is shown by the annexed drawing, Figure III. Upon sending my order to a prominent optician I was told that the plan had been unsuccessfully tried. I have since learned that other opticians had made one or two pairs of such spectacles, with indifferent success. Some people liked them very much, others could not wear them. So, though original enough with me, the idea had already been realized; to whom the credit of the first invention and introduction is due (a small matter) I do not know. But I am convinced that the plan is a most excellent one and worthy of recommendation. Against the advice of opticians, I have persisted in experimenting and ordering them for my patients, and now have several patients wearing them with a satisfaction they never had with any other style. The lenses are centred, there is no prismatic effect, and by the slightest turn of the head when looking down the ground

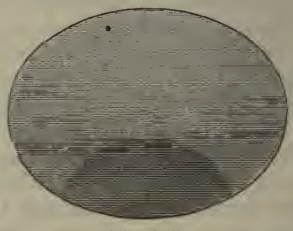

Fig. III.

in front of the feet can be seen through the distant lens. The vision sideways is, of course, perfect. I believe the failures referred to in the attempt to use them were due to the disproportionate size of the lower lens, to the clumsy manufacture of the whole, to imperfect adjustment to the eyes, or to impatience on the part of the wearer. These are all important points. The size of the reading lens may in some cases be smaller or larger than that given in the cut, according to the occupation, the contour of the face, the peculiarities of habit, of holding the head, etc., of each patient. In most cases the proportions given will not be far wrong. It is also self-evident that such a pair of spectacles will require the utmost exactitude of adjustment to the contour of the nose, pupils and face. As to method of inserting or adding the stronger lens to the distant one, manufacturers will probably differ. As usually ground, it is beveled and set into a ground-out and grooved space in

the larger lens. This makes it necessary that the glass shall be pretty thick, renders the line of junction very conspicuous, and makes a rim to hold the two pieces firmly in place unavoidable. I have been much pleased with an ingenious method devised by Messrs. Wall and Ochs, manufacturing opticians, whereby most of these objections are obviated. The spherical presbyopic lens is reduced in thickness to a mere film of crystal, and is glued with Canada balsam to the lower and inner side of the unmutilated distance-lens. In this elegant manner the lenses are rendered very light, the added lens is very inconspicuous, and the spectacle rim is dispensed with, the whole presenting a neat and workmanlike appearance. Finally, it must not be forgotten that the patient must be repeatedly cautioned about the preliminary period of discomfort in "breaking them in." It requires no little persistence and patience in wearing them before one learns how to use them best. To some extent, the whole carriage of the head and the innervation and habits of many muscles are changed. I am in the habit of making every patient promise he will give them a month's trial despite all vexation and discomfort. Within this time he grows most enthusiastic in their praise.

119 South Seventeenth Street.

CONVULSIONS IN CHILDREN, WITH SPECIAL REFERENCE TO ETIOLOGY AND TREATMENT.

BY C. L. DODGE, M.D.,
KINGSTON, N. Y.

The term convulsion, or eclampsia, is here used in a somewhat restricted sense. I cannot go as far as some writers who believe this condition to be in most instances epileptoid. I agree with Nothnagel[1] who asks: "What is there now remaining of what was formerly eclampsia? Are we altogether justified in still retaining the name? We believe so, and are of the opinion that the title eclampsia should be reserved as the name of an independent affection, which, it is true, can at present be defined only by its clinical symptoms. We propose that the designation eclampsia should be made use of for those cases of epileptiform spasms which, independent of positive organic diseases, present themselves as an independent acute malady, and in which, so far as our present knowledge allows us to judge, the same processes arise, generally in the way of reflex excitements, and the same mechanism in the establishment of the paroxysms comes into play, as in the epileptic seizure itself." Allan McLane Hamilton[1] says: "If any distinction at all be made, it should be one founded upon the fact that epilepsy is usually an organic disease, or, more precisely, a disease which when established is dependent upon some disorganization, while eclampsia is used to express those seizures of a purely functional nature."

Definition.—Convulsion (from the Latin *convello, convulsum*, to pull violently), synonym Eclampsia, is an acute nervous affection occurring in paroxysms, during which the patient loses consciousness, the muscles of the body are spasmodically contracted and the limbs first stiffened and twisted, then agitated by irregular involuntary movements: in a word, an affection in which there are clonic spasms. Convulsions occur in a great variety of diseases and are dependent upon various causes. The classification into three forms adopted by J. Lewis Smith is the simplest and most convenient with which I am acquainted. He says:[2] "The term essential or idiopathic is used when the convulsions have no appreciable anatomical character, that is, when there is no apparent pathological state in the brain or elsewhere, which gives rise to the attack. If the cause is disease of the brain or spinal cord, it is termed symptomatic. If eclampsia arise from local disease elsewhere than in the cerebro-spinal axis, as from pneumonia, the term sympathetic is employed."

Causes.—The causes of the convulsions of children are many and varied, and one object of this paper is to endeavor to sift out the most important ones, that treatment may be more rational. First among predisposing causes is age The affection is peculiar to young children. Probably the age at which convulsions most frequently occur is from six months to thirty months—the period occupied by dentition. I do not, however, regard dentition as the most frequent cause, but think that the occurrence of convulsions at that time is due to the fact that the nervous system of the child is then so much more susceptible and impressionable than it is in adult life, owing doubtless to rapid growth of the child.

[1] Cyclopædia of the Pract. of Med., by von Ziemssen. Vol. xiv, p. 301. American Edition.

[1] Pepper's System of Medicine. Vol. v, p. 465.

[2] Diseases of Children, article Eclampsia.

The form of eclampsia under consideration is rare after seven or eight years of age.

Hereditary tendency is an important factor in the etiology of convulsions of children; and in the majority of cases the predisposition is said to be transmitted by the mother. The weight of authority seems to be against the view that puerperal convulsions in the mother leave a tendency to convulsions in the child. It is nevertheless true that eclampsia is frequent in certain families, seemingly through inheritance; it is as much so, at least, as insanity or phthisis. Children with rickets are very susceptible to influences that produce convulsions. Huhlings Jackson, quoted in the *Medical News*, August 7, 1886, says: "The softness of the ribs in rickets deprives the diaphragm of its normal support, and seriously embarrasses respiration. The respiratory centre is thus perpetually bathed in blood so highly venous that it requires only a slight additional stimulus to throw it into furious action. A coughing fit for example will, by checking the already imperfect respiration, decide the onset of a convulsion."

The exciting causes of eclampsia are very many. It occurs as a symptom in nearly all cerebral diseases: hypertrophy of the brain, thrombosis of the cranial sinuses, congestion of the brain, cerebral hemorrhage, etc. The most frequent cause, however, I believe to be irritation of the gastro-intestinal tract produced by the ingestion of indigestible substances. In a record of twenty-four cases of convulsions, all but four were plainly caused by indigestible food or over-feeding. One great difficulty in ascertaining the cause in many cases, is that parents dislike to admit that anything improper has been given to the child, and often they are entirely ignorant of the fact. Children frequently have these unwholesome articles given to them without the knowledge of the parents. At holiday times it is always well to make the strictest inquiries of all concerned; if the parents can give no information, perhaps someone else can. To illustrate, last Fourth of July I was hastily summoned to see a little boy, two and a half years old, who had just had a severe convulsion and seemed to be threatened with another one. I inquired of the parents if he had eaten anything that might be difficult of digestion. The answer was no. I then inquired of the older children if he had had any nuts or fruit. His sister then stated that some time in the forenoon he had eaten an orange, "skin and all." An emetic soon proved the truth of her statement, a large portion of the orange, with the rind, being vomited. Another case was that of a child eighteen months old, whose mother had given it a quantity of Bologna sausage, the child having no back teeth yet; there was small cause to wonder at the consequences. Smoked beef also is a frequent cause, it being such a common article of diet. Meat in any form should never be given to children until they have all their teeth. The worst case of convulsions I ever saw was caused by eating stewed prunes. At holiday time, and after children's parties, we always look for some cases of this kind. Quite a number of cases are on record in which the child died in a convulsion, and at the autopsy no cause could be found other than a stomach well filled with undigested food. Giving to young children a little, and what is worse, a good deal of everything, is very bad practice. Nuts, candies, unripe fruit, rich cake and pies, hot bread, and meat when the child has not sufficient teeth to masticate properly, are the exciting causes in a large proportion of cases of convulsions. Indeed, over-feeding and improper food are the causes of nine-tenths of the convulsions of children, if we exclude diseases of the brain and acute fevers.

Worms also are said to be a cause, but I have never seen a case in which I could satisfy myself that such was the fact. I have on several occasions at the earnest solicitation of the parents, who very frequently believe that worms are a cause of spasms, and that treatment should always be directed against them, administered a vermifuge, but thus far with negative results. I am well satisfied, however, that very many more cases of eclampsia are occasioned by the indiscriminate use of the various patent vermifuges with which the market is flooded, and which are administered on the slightest provocation. I have seen several cases in which there seemed to be no other adequate cause, the "worm medicine" alone being sufficient to account for the fits. I recall one case, that of a boy four years old, whose death in my opinion was due to an overdose of santonin. It must be remembered that the ignorant lower classes give these remedies in large doses and without any judgment, and with the idea in many cases, that they must persist in the use of the medicine until they "fetch the worms." I do not wish to be understood as denying *in toto* the possibility of worms being a cause of eclampsia; but I do insist that, by the laity at least, they are given undue prominence as a causative factor. This is not

merely an individual opinion, but it is held by some of the highest authorities. Prof. Flint says[1]: "That they (worms) may give rise to convulsions, epileptic paroxysms, chorea, and other affections of the nervous system, as is generally supposed, must be considered as by no means established."

Dentition.—The opinion in the profession once was, and in the community still is, that dentition is the sole and sufficient cause of many of the diseases of childhood. Especially is this true with reference to spasms, or fits as they are popularly called. Physicians at the present day are very much divided in opinion as to the true position of dentition in infantile pathology. Some authors believe that the evolution of teeth when painful and difficult has much to do with many of the ailments and disorders of early life. Others affect to believe that dentition is purely a physiological process, and therefore does not require the interference of art. They say that it is not pathological and that surgical measures are uncalled for. As in all other medical matters, I think it is wise to avoid extremes; a happy mean is usually safest and best. Why there should be such extremists it is hard to understand. Anyone who can recall the eruption of his first "wisdom tooth" should, it seems to me, have clear and decided views on the subject of "teething." I well remember lying awake all night while cutting one of mine. I was feverish, restless and in pain, and this is precisely the condition of the child when cutting teeth. Add to this that the child's whole nervous system is rapidly undergoing development, and is at this time extremely susceptible to pain, and it will seem not at all strange that convulsions and other disorders are developed as a consequence. Difficult dentition is perhaps not so often a direct as a predisposing or coöperating cause, producing a sensitive state of the nervous system which requires but a slight additional stimulus to determine a convulsion. Cases do occur, however, in which the pain and nervous excitement caused by the advancing tooth seem to be the only causes discoverable. This is especially true where several teeth penetrate the gum at or about the same time.

West and Reynolds are of the opinion that convulsions occur in children as delirium does in adults; in other words, that they are the most common expression of neurotic instability. Acute inflammations, especially of the respiratory apparatus, are sometimes causes; one of my cases occurred in the beginning of an attack of pneumonia. Convulsions are also said to occur at times in severe coryza. They are often seen in the commencement of small-pox and scarlet fever, and in the course of the latter disease. They are a common complication of pertussis and are also witnessed in some forms of malarial fever. One of my cases seemed to be dependent on malarial poisoning, and was finally cured with quinine. In young children, burns and scalds are often followed by severe spasms, frequently succeeded by coma and death. Among other causes may be mentioned constipation, dysentery, urinary calculi, both renal and vesical, and uræmic poisoning, as the result of scarlatinal nephritis. Dr. Weir Mitchell[1] states that he has seen children reduced to a state of pitiable nervousness, with feebleness of will and convulsive states not epileptic, owing to unsuspected albuminuria. The mysterious changes effected in the milk of the mother, as the result of violent emotions such as fright, anger, or grief, have been known to cause eclampsia and even death in the child. Preputial adhesions and a narrow prepuce are quite common, and are *sometimes* the cause of reflex disturbance, as the result of constriction or adhesion of the prepuce; but of late years the importance of these consequences has been greatly over-estimated, and this has too often led to rash and unwarranted surgical interference. Comparatively few children are ever inconvenienced by this defect, and doubtless there are hundreds to-day who are none the worse because of this slight anatomical peculiarity. Allan McLane Hamilton[2] says: "The alleged sexual causes of epilepsy are many and some of them very doubtful." This applies with equal force to the eclampsia of children. In my opinion sexual derangements are a very infrequent cause of "reflex neuroses."

Relations between the Convulsions of Childhood and Epilepsy.—On this subject Dr. H. C. Wood[3] writes as follows: "The question of the relations between epilepsy and the convulsions of childhood, is one of great importance. As already stated, I do not believe that the diagnosis between these two affections is to be made out by the symptoms of a single fit. Moreover, it seems to me positively established by clinical experience that the tendency to convulsions in the child is closely associated with the epileptic

[1] Practice of Medicine, p. 513.

[1] *Medical News and Library*, Dec., 1877, p. 31.

[2] Pepper's System of Medicine, Vol. v, p. 473.

[3] Nervous Diseases and their Diagnosis, p. 109.

diathesis, and that in many cases accidental convulsions are the commencement of a life-long epilepsy. In a very large proportion of the cases of epilepsy there is a history of repeated convulsions during early childhood; and there must be inherent differences in the nervous constitutions of children living under exactly similar conditions, some of whom frequently suffer from convulsions, whilst others pass unscathed. Some children are evidently born with the convulsive tendency, which in many cases is so firmly fixed in the nervous system that it cannot be affected by any mode of life or treatment; its possessor is doomed from birth to a hopeless epilepsy. I believe that there is a second class of cases in which the epileptic tendency exists, but in so slight a degree as to be controllable by hygienic and medicinal treatment. Under these circumstances the child may suffer from repeated attacks of accidental convulsions and become epileptic, or by great care the early convulsions may be prevented, and the nervous system allowed to harden to the normal mould." While it is unquestionably true that in many of the cases of epilepsy there is a history of convulsions during early childhood, it is equally true that hundreds of children have convulsions who never develop epilepsy when grown. I have made numerous inquiries on this subject, and could give a very long list of personal acquaintances who had convulsions during childhood, but have never had the first symptom of epilepsy. J. Lewis Smith[1] says that at the Bellevue Hospital Outdoor Poor Department he has carefully observed cases brought there during the last six years, and has been unable to convince himself that there is any connection between the convulsions of young children and epilepsy of later life. The age at which epilepsy is liable to develop he says is from five to seven years, but he regards the two as independent conditions. Hammond[2] also says: "These latter (convulsions of infancy) may pass into epilepsy; but, if they do not I have never been able to find a single case in my experience in which epilepsy ensuing in adult life has been preceded by the ordinary infantile convulsions." Flint[3] says: "Facts showing how frequently epileptoid attacks occur without being followed by epilepsy, are wanting, but it is certain that the latter by no means invariably follows." I do not wish to imply that epilepsy does not occur in young children, as that is an admitted fact, two of my own cases being undoubtedly epileptic; but I wish to protest against the idea that if a child has a convulsion it is likely to become an epileptic, for I do not think facts warrant any such assumption.

Anatomical Characters.—It is obvious that a disorder arising from so many different causes, and being dependent so frequently upon other diseases, must vary greatly in its morbid anatomy. In those cases of acute inflammation of the lungs or other organs attended with rapid pulse, pulsating fontanelle, and other evidences of arterial excitement before convulsions occur, active congestion of the brain would seem to be the condition present, and the obvious cause of the fits. At other times passive congestion of the brain plays a part in the causation, as is seen in a paroxysm of whooping cough, for instance. In the contagious diseases, such as small-pox and scarlet fever, the convulsion is believed to be due to the action of the specific virus on the cerebro-spinal system. In cases dependent upon malaria, some think the occurrence of convulsions is due to the poison itself, others to the high temperature. In the case that I have recorded the temperature was not high, and I am inclined to believe that the true cause was congestion of the brain as the result of a severe chill; young children seldom shake hard, but the congestion of internal organs takes place just the same.

When the eclampsia is dependent upon disease of the brain, congestion plays an important part associated, perhaps, with effusion, or compression of the brain from some cause. One of my cases was undoubtedly due to cerebral hemorrhage. The child was eleven months old and in good health; it was playing on the floor in the morning when suddenly, without any warning, it was taken with a convulsion from which it never rallied, death taking place about six o'clock the same evening. The right side was paralyzed, and it died comatose.

Symptoms.—I will not attempt an elaborate description of a convulsive attack; it is too familiar to every practitioner of medicine. As to the premonitory symptoms, I think they are rarely observed, for the reason that in the majority of cases there are none. In acute diseases, fevers, and inflammations the general symptoms of these disorders are so prominent that attention is diverted from any slight nervousness or irritability which

[1] *Medical Record*, Vol. xvii, p. 522.

[2] Diseases of the Nervous System, 8th ed., p. 702.

[3] Practice of Medicine, p. 757.

at other times might be noticeable; and as it is in this class of cases chiefly that we observe prodromata, I think it can be safely said that the latter are seldom recognized. The prodromic stages of the various affections that are sometimes complicated with convulsions, would be observed as a matter of course; but these, I hold, should not be termed premonitory symptoms of eclampsia—they are properly the premonitory symptoms of the primary disease, whatever this may be.

Eclampsia may be general or partial. Partial eclampsia is the more common form. Death may occur from cerebral congestion, which if continued is liable to end in effusion of serum or extravasation of blood, when all convulsive movements cease but consciousness does not return. The first attack is rarely fatal. The mode of death is usually in coma.

Diagnosis.—The diagnosis of eclampsia is generally easy. It is most likely to be confounded with epilepsy. As regards the seizure itself, there is no appreciable difference; but epilepsy is rare under six years of age, and convulsions are frequent. The probabilities are always against epilepsy in a child under six years of age. If there is a history of exposure to scarlet fever, smallpox or malarial poisoning; or if symptoms of inflammation of the lungs are present; or if the child is teething, or suffering from obstinate constipation, the cause of the trouble becomes apparent. If there is a history of overeating, or of the use of indigestible food such as stale or green fruit, nuts, candy, etc., it becomes perfectly clear that the case is one of eclampsia.

Prognosis —Symptomatic eclampsia is always serious. If convulsions occurs in the course of a cerebral disease it indicates the approach of death; but if at the commencement, some recover. The recurrence of it, whatever the cerebral disease, is an almost certain prognostic of death (J. Lewis Smith).[1] In sympathetic eclampsia the prognosis obviously will vary with the primary disease which causes it; it will also vary according to the stage of that disease. Convulsions occurring at the commencement of an eruptive fever generally subside without untoward symptoms, and the fever pursues a favorable course. Occurring after the appearance of the eruption, however, it is always a grave symptom, and is usually premonitory of a fatal termination.

J. Lewis Smith states that he has never known a patient with scarlet fever recover who had convulsions after the rash had covered the body. J. F. Meigs, however, relates one favorable case; he also states that in convulsions consequent on pneumonia or a burn, more die than recover. One of my cases occurred at the commencement of an attack of pneumonia and recovered. It is said that death does not ordinarily occur from one attack, which is undoubtedly true. One of the cases which I have recorded, however, died in the first fit; but this was unquestionably due to cerebral hemorrhage. Convulsions occurring in the course of whooping-cough are of very serious import if they be not associated with dentition, or some disturbance of the alimentary canal. In eclampsia caused by errors of diet the prognosis is good, as it is also when dentition seems to be the exciting cause.

Treatment.—In the treatment of no disease is it more important to ascertain if possible, the cause, than it is in convulsions of children. I endeavored to show under the head of causation, that a very large proportion of convulsive attacks originated in the condition of the stomach or bowels, and for this reason, emetics are frequently indicated. In all young children in whom brain disease, acute fever or dentition can be excluded as exciting causes, an emetic should be given. The physician should not be satisfied with a teaspoonful of syrup of ipecac, but should give ten drops of fluid extract of ipecac, or ten grains of the powdered ipecac in half a wineglassful of warm water, and repeat in fifteen minutes if necessary. When the child is past swallowing I would suggest the use of apomorphine hypodermically. If the emetic acts promptly in removing the offending substance, the convulsions in most cases will be arrested, and will not recur. An emetic has some peculiar effect in controlling the spasmodic movements, probably through muscular relaxation, apart from the mere removal of irritating substances from the stomach. If there is reason to suspect that a portion of the indigestible matter has passed into the bowels, an enema of soap and water will usually produce a free and speedy evacuation, and will often disclose the cause of the spasms by the expulsion of seeds and half-digested fruit, which the child has eaten. If the enema fails it is good practice to administer a cathartic, and calomel is one of the best; it is easily taken dry with a little sugar. Castor oil is preferred by some in very young and feeble children. These measures should be followed by full doses, in proportion to the age, of bromide of sodium, which is very

[1] Diseases of Children, p. 393.

much more acceptable to a weak and irritable stomach than bromide of potassium. I have found this to be true on several occasions, and decidedly prefer the sodium salt in these cases. If the convulsions do not cease by the use of the above measures, chloroform should be given by inhalation; it will arrest convulsions when nothing else will, and usually very little is required. I have seen the convulsions cease as soon as the child became anæsthetized, and they have not returned. It should be used only during the convulsion and withheld as soon as the spasmodic movements cease. I have never seen any untoward results follow its use, in cases of this kind. Chloral is also highly spoken of, but I have not had much experience with this drug.

The use of opium in this as in many other diseases of children has given rise to much discussion; the teaching of the late Dr. Beek, never to give opium to children under four or five years of age, has deterred many from using this valuable remedy. Modern writers on diseases of children do not prohibit the use of opium. It is not so very many years ago that opium was held to be contra-indicated in bronchitis and pneumonia. There can be no doubt of its good effect in certain cases, especially when the child seems to be in pain, or when diarrhœal troubles show the cause to be in the intestines.

With reference to the use of the hot bath, I am inclined to think that its use should be somewhat restricted; that is, I would not recommend it as a routine treatment, especially when it is to be left to the parents or friends to make use of. It is held by some that the child is liable to have one or more convulsions while in the bath, and that the agitation incident to the giving of the bath adds to the excitement of an already disturbed nervous system. The great object in treatment is to keep the nervous system as free as possible from agitation. The force of this objection is lost if the child be unconscious, and the hot bath is often a valuable means of inducing muscular relaxation sufficient to enable the child to swallow. I am convinced that it is often productive of more harm than good, when in the excitement of the moment the water is too hot or too cold; the child is frequently kept in the bath after the water becomes cold, thereby inducing a chill, which adds to the cerebral congestion already present. When given under the supervision of a physician in appropriate cases I believe it to be a beneficial agent. Putting the feet into hot mustard-water can certainly be productive of no harm. It should be continued from five to twenty minutes according to the severity and duration of the attack, cold applications being made to the head at the same time.

In convulsions arising from dentition, chloroform is the best remedy to arrest the spasm, after which, if the gums be swollen and hot, and the child is feverish, scarification is proper, followed by a mixture of bromide of sodium and opium in the form of paregoric. This is the form of eclampsia in which opium in small doses combined with the bromide is especially indicated. What is the condition in these cases? There is pain—intense, sometimes, for an infant—combined with nervous excitement. What treatment could be more rational than anodynes and nerve sedatives? And clinical experience proves this to be correct reasoning. Some prefer chloral with the bromides, but I think this combination more appropriate in cases in which the convulsions continue if chloroform is not used. The immense doses of morphine used in uræmic and puerperal convulsions would seem to disprove the alleged dangers attending its use.

When the convulsion occurs at the commencement of an eruptive fever or pneumonia, no special treatment is required, beyond the addition of bromide to the treatment appropriate to the fever. If it occurs later and the eruption has receded, it becomes a serious complication, and active revulsive measures, as hot mustard baths, are necessary.

In dysentery or internal inflammations, counter-irritants over the abdomen, with full doses of opium in proportion to the age, and the bromides are proper. When due to malarial poisoning the convulsion should be arrested by the usual means, after which calomel, castor oil and quinine should be given to prevent its recurrence. If the child appears cold and chilly after the convulsion, opium in some form should be given till the quinine has time to have its effect. Veratrum viride I have had no experience with.

In cases due to cerebral congestion, if active a purge is indicated, but it is often better to give an enema at once. External derivative agents are also indicated, such as a warm mustard foot-bath followed by sinapisms to the back of the neck, feet, and calves of the legs, with cold applications to the head; and the bromides internally. In passive congestion the disease is not primary, but dependent upon some antecedent

condition, such as whooping cough, when the treatment appropriate to that disease should be instituted. In cerebral hemorrhage very little can be done. Cold applications to the head, mustard to the back of the neck and legs, with prompt purgation are the most that can be done. Some advocate leeches to the temples if congestion is marked. Bromides may also be given if the child can swallow.

ACUTE UNILATERAL OPTIC NEURITIS, WITH THE REPORT OF A CASE.[1]

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Cases of sudden failure of sight in one eye, with little or no ophthalmoscopic changes, are occasionally encountered, in which the attack is attributed to exposure to cold. Sometimes in these instances congestion of the optic disk is present, and a retro-ocular neuritis has taken place. Other cases of acute optic neuritis, sometimes monocular, sometimes double, are on record. Thus Max Haadel[2] observed nine cases, some single and some double, with and without defects in the field of vision, usually with serious disturbance of sight, mostly with pronounced inflammation of the papilla and neighboring retina, in which exposure to a draught of air was the imputed cause. Periostitis at the foramen opticum was doubtful, and the absence of syphilis, sugar and albumin, lead and other poisons was assured in every case. In M. Schlüter's[3] statistics, among thirty-eight cases of neuritis and neuro-retinitis, seven are classed as primary, while the remainder are arranged as follows: thirteen of central origin; six from specific causes; four followed as the result of pathological orbital processes; two from abuse of alcohol and tobacco; two from albumin; and one each in connection with the puerperal state, after injury, from acute myelitis, and from hereditary reasons. E. Schmidt,[4] in an examination of the cases of optic neuritis in the clinic of Prof. Hirschmann, at Charkow, found, among 120 cases in which the etiology was recorded with some degree of exactness, two instances of papillitis or papillo-retinitis due to cold. Voissius[1] has recorded a case of monocular optic neuritis in a man sixty-one years old, the attack coming on as the result of catching cold during a long, wet drive. Recovery, with a hemiopic defect in the field of vision, was the outcome of the disorder. Roi[2] reports some examples of optic neuritis which he looked upon as rheumatic. They appeared monocular, were accompanied by a speedy diminution of visual acuity passing into amaurosis, but not, however, to the exclusion of a return to normal sharpness of sight. H. F. Hansell[3] describes two instances of acute optic neuritis of rheumatic origin; one monocular, in a healthy married woman, and the other double, in a man aged thirty-one. In each case there was sudden loss of vision, swollen optic disks, and under treatment a rapid return to normal visual acuity. In Dr. Hansell's paper references to analogous cases are recorded, and L. W. Fox[4] has recorded an instance of acute monocular optic neuritis. Recently R. H. Derby[5] has reported a case of unioocular neuro-retinitis in a girl whose father had had syphilis, but who had no other manifestation of constitutional taint. There was at first a central scotoma, then optic neuritis. Light-perception was lost, but under mercurial inunctions and iodide of potash the swelling of the disk, which had amounted to 7 D., subsided, and fair vision was recovered. Cases of optic neuritis without evident cause are occasionally recorded, as one by Power[6] The patient was an anæmic lad of seventeen; the neuritis was double; albumin and syphilis were absent; the lad had had two attacks of rheumatism and his father was gouty. Friedenwald[7] describes an instance of right optic neuritis in an otherwise healthy girl of fourteen, preceded by violent headache and other symptoms indicating grave cerebral disturbance, but in which perfect recovery

[1] A paper read at the meeting of the Philadelphia County Medical Society, Oct. 10, 1888.

[2] Max Haadel. Inaug. Diss., Berlin, 1885. Abst. *Centralbl. für prakt. Augenheilk.*, p. 223, 1885.

[3] Schlüter. Inaug. Diss., Berlin, 1881. Abst. *Nagel's Jahresbericht*, xii Jahrgang, p. 305.

[4] Schmidt. Wjestnik Ophth., 1885, p. 273. *Archives of Ophthalmology*, vol. xv, p. 249.

[1] Voissius. *Klin. Monatsbl. für Augenheilk.*, xxi, p. 298.

[2] Roi. De la névrite optique humatismale, Paris, 1886.

[3] H. F. Hansell. *Medical News*, Aug. 7, 1886.

[4] L. W. Fox. *Amer. Journ. of Ophthalmology*, July, 1884.

[5] Amer. Oph. Soc., 1888. *N. Y. Med. Journ.*, Oct. 6, 1888

[6] Power. Trans. Oph. Soc., United King., vi, pp. 361–368, 1886.

[7] A. Friedenwald. *N. Y. Med. Journal*, Feb. 5, 1887.

followed. He classed her case with these examples of optic neuritis, referred to by Juler, and occasionally met with in young girls, the cause assigned being some menstrual disturbance, the presence of which, however, careful inquiry often fails to elicit. Usually the neuritis is preceded by severe headache, and the prognosis is unfavorable. No further reference to the many cases of neuro-retinitis described in connection with irregularities of the menstrual functions need be made. Hirschberg[1] has seen several instances of primary optic neuritis, whose course is very typical. The disease is divided into three stages: the first, characterized by great visual disturbance, with slight ophthalmoscopic appearances; the second, by diminution of the visual disturbance and very marked inflammation of the disk; and the third, usually by almost complete recovery, with pallor of the disk. The cases for the most part occur in women, but are not connected with derangement of the sexual functions. Partaking somewhat of the nature of such cases, but not without a history of exposure as the exciting cause, is the subject of this communication.

Mrs. W., forty years old, consulted me on July 11, 1888, because for a week past she had suffered from neuralgic pains in and above the eyes, most marked upon the right side. Bright light was distressing and pain followed when the eyes were rolled upward; slight tenderness was apparent when pressure was made upon the right globe. The vision in each eye was $\frac{5}{VII}\frac{1}{11}$, the amplitude of accommodation 3.5 D.; there was high insufficiency of the internal recti, so that a divergent squint was evident when the eyes attempted to fix a point 15 cm. distant. The fundus of each revealed no gross lesions, save a slight retinal haze around the upper and lower edges of the right disk, the deeper layers of which were gray. The maculas were normal and the refraction appeared to be a simple hypermetropia of 1.5 D. In the absence of any general derangement the peri-orbital pain was attributed to eye-strain, and atropia drops were ordered for the purpose of measuring the refraction error. The correcting glass proved to be + 1.5 s. and with it normal vision $\left(\frac{5}{V}\right)$ was acquired. During the application of the atropia the neuralgia disappeared. The drops were discontinued and the patient directed to return in two weeks. During the measurement of the refractive error, the patient on several occasions stated that although she saw the same number of letters with the right eye that she did with the left, she failed to see them with the same distinctness; but no changes at this time were present in the fundus. This indistinctness gradually assumed the appearance of a definite, dark area in the field of vision; the peri-orbital pain returned; and five days after the last ophthalmoscopic examination had failed to discover any changes in the disk or retina, she returned with the vision sunken to ability to count fingers, with well-marked right-sided optic neuritis. All edges of the disk were woolly and its upper margins entirely hidden, while a flame-shaped hemorrhage was situated above and to the inner side. The apex of the swelling was +3. D., the vessels were about normal in size, and the macula free from disease. The pupil was of medium size and acted sluggishly to light and shade. A few days before this time she had gone on an excursion with her children, became much overheated, and had afterward waded about in a neighboring brook. It was in the evening of this day that the neuralgia returned, the definite dark area appeared in the field of vision, and shooting pains attacked the deep muscles of the thighs. Further examination proved an entire absence of any symptoms pointing to brain disorder; the heart and lungs were normal and the patient was not anæmic; there had been no suppression of the menstrual flow, and this function was natural; no active uterine disease existed, except a slight prolapsus which was not then under treatment. The urine was free from albumin, sugar, and tube casts, and the last recent illness, several years before, had been an attack of peritonitis, from which a good recovery had resulted. Dr. James Tyson, who saw the case in consultation, confirmed the accuracy of these examinations. Syphilitic infection and the action of lead or other poisons were carefully excluded. The vision continued to sink, and on the following day was reduced to faint quantitative light-perception and the disk, if anything, was slightly more swollen. The temple was freely leeched and the patient directed to take fifteen grains of salicylate of sodium before each meal and seven and a half grains of iodide of potash, with one-twenty-fourth of a grain of bichloride of mercury, after each meal. Three days later, or on July 30, the vision was slightly improved to the ability to see the hand move, and the

[1] Hirschberg. *Centralbl. für prakt. Augenheilk.*, Nov., 1887.

pain was distinctly better. The medicine was continued and small fly blisters ordered placed upon the temple. August 1, the salicylate of sodium was discontinued, but the other medication continued, vision improved and large letters (Sn. CC) were faintly recognized. August 6, marked improvement, V.$=\frac{5}{xxxv}$; edges of the disk visible all around and only a faint remnant of the hemorrhage. August 20, neuritis had practically subsided; V.$=\frac{5}{x}$, form and color fields normal in extent; no scotomata; ordered one-twenty-fourth of bichloride of mercury after each meal. September 9, V.$=\frac{5}{vii\frac{1}{11}}$, disk pallid, and all traces of the neuritis had disappeared.

In the absence of any symptoms pointing to cerebral disturbance, with no uterine disease save a slight prolapsus and the history of a leucorrhœa no longer active; with the menstrual functions normal; with a healthy circulatory apparatus and the urine free from albumin, sugar, and tube casts, and with the direct account of overheating and exposure, we may fairly conclude that this was an instance of genuine, acute optic neuritis. The history shows that before any ophthalmoscopic changes were evident, and before there was any positive diminution in visual acuity, the field of vision was invested with a haze which afterward assumed a definite, dark form, probably coincident with the first appearance of the inflammation around the papilla and the loss of sight. Hence it is evident that the attack was in process of formation and was precipitated by the wetting of the feet and sudden cooling after an overheating. Cases of optic neuritis apparently due to exposure, as has been pointed out by Leber and others, are mostly monocular; and rheumatism, perhaps upon insufficient evidence, has been cited as the cause. Gowers,[1] writing upon this point, says: "Neuro-retinitis has been loosely ascribed to rheumatism, but only on the ground that it has sometimes appeared to be due to cold." Rheumatic inflammation at the back of the orbit, however, according to the same author, may damage the optic nerve. Michel,[2] commenting upon a reported case of acute, peripheral retro-bulbar neuritis, remarks that he has never observed a "rheumatic" neuritis, and he considers the assertion of such as a mark of ignorance of the causes especially operative in the production of inflammation of the optic nerve.

Hansell[1] thinks "that a true rheumatic inflammation of the fibrous coat of the nerve between the optic foramen and the sclerotic" quite possible, but owing to the infrequent opportunity for section and examination admits that "our pathology is, at best, speculative." The central scotoma which existed in this and similar cases denotes an affection of the sheath of the nerve extending into its substance, not, as Hirschberg remarks, as would have been supposed before the macular fibres were discovered, a central inflammation extending outward. The prognosis depends to a certain extent upon the site of the lesion, and the termination may be favorable, as in the case reported, or a permanent atrophy of the disk may result. Hirschberg,[2] in his cases of primary optic neuritis, has found usually that the second eye is attacked; the interval may be days, or weeks, or months. Three of his cases illustrate this fact A woman, forty-two years old, suddenly lost the sight of the right eye; in six days from the beginning of the attack this was well, but the left eye was attacked and optic neuritis developed; in three weeks recovery had taken place and the fundi were normal. In a second case a woman, twenty years old, had slight temporary loss of vision in the right eye three weeks before coming under observation for loss of vision in the left, which came on eight days before. Four months later she came with the right eye similarly affected, while the left had practically recovered. A third instance was that of a peasant girl, seventeen years old, who had her right eye attacked in 1878; she recovered, and in 1884 had her left eye attacked, and also recovered from this.

The treatment has already been discussed. Leeching of the temple, followed by blisters, diaphoresis, together with the salicylates and iodide of potash, yield the best results. Improvement may take place before the remedies have time to take effect.

[1] Medical Ophthalmoscopy, 2d ed., p. 230.

[2] *Nagel's Jahresbericht*, xvii Jahrgang, p. 381.

—The *Medical Press and Circular*, Oct. 17, 1888, says that a manufactory has been started in Italy for the manufacture of a culinary oil from grape pips. A hundred pounds of the seeds yield about five pounds of a clear yellow oil.

[1] *Loc cit.*

[2] *Loc cit.*

THE SIGNAL SERVICE AND THE PHYSICIAN.

BY G. WALTER BARR, M.D.,
BRIDGEPORT, ILLINOIS.

Rheumatism and diseases of like character which have variations in symptoms in accordance with changes in barometric pressure, have been noticed for a long time; but the relation existing between that combination of temperature, barometric pressure, moisture, condensing point, wind, *et cetera*, which we call the "weather," and that combination of symptoms which leads us to speak of a patient as better or worse has never been fully worked out. I recollect hearing a celebrated gynecologist advise the postponement of serious operations when the wind is east, and have profited by the advice to the extent that my surgical operations are, whenever this is possible, performed in bright, clear weather. Walking patients often ask permission to make journeys, and patients with lung disease ask questions in the answer to which the weather is an important factor. Weather lore should not be left to old women and to men with goosebones or moon tables.

The source of the most accurate meteorological knowledge at present is the Signal Service of the United States Army. I have been for some time in the habit of watching the service here and allowing its predictions to influence my treatment of patients. The results have been such as to incite me to call the attention of the profession to the benefits of the practice.

Should a patient have any fever with the convenient prefix "typho-," a low barometer and an east wind will make him worse, unless their effects are overcome. The day before the beginning of a week's rain is a bad time to amputate a thigh or perform a laparotomy. In the back-country districts I have often amazed the visiting cohorts by ordering, on a balmy day, window-panes put in and crannies stopped, "because it will get cold about ten o'clock to-night." Only a country doctor, who is laying up ninety per cent of his treasure in heaven on the endowment plan, can appreciate the value of knowing when a cold wave is coming down on his scantily-clothed, miserably-housed sick.

As to the value of the Signal Service predictions, each man must collect his own data of verifications and not believe what his political organ says about them. Actual, careful records kept by me here for two years show a verification in over ninety per cent. of the cases, and that five per cent. more of the whole could be correctly predicted by a local observer. It seems to be difficult to make people understand what the predictions mean, and more difficult still to get them to make careful notations each day of weather and temperature variations. It does not do to follow blindly the "Indications," but local conditions and effects based on experience must become factors in the prediction of the weather. With a good vane and thermometer, and a little diagnostic skill, the Signal Service enables us to predict meteorological conditions about as correctly as the text-books enable us to diagnosticate pathological states. The weather influences prognosis and should influence treatment, and the truly scientific physician may well give it some attention.

SOCIETY REPORTS.

NEW YORK ACADEMY OF MEDICINE.

Regular Meeting, October 18, 1888.

The President, A. JACOBI, M.D., in the chair.

DR. M. ALLEN STARR read a paper on

Apraxia and Aphasia; Their Varieties and the Method of Detecting Each,

in which he said that some of the symptoms of aphasia are not recognized by the patient, while his condition prevents him from describing others to the physician. It is well, therefore, to call attention to the proper manner of examining patients who present one of the most interesting of all local symptoms, namely, aphasia. He said he ventured upon this task because of the recent discovery of defective thought and memory associated with aphasia, a condition which has been named "apraxia."

Speech disturbance, Dr. Starr said, is divided into sensory and motor aphasia. The memory of the sound of a word as spoken, the memory of its appearance when written, and the memory of the muscular movements necessary to write or pronounce it, are known to be distinct from one another and yet to be associated. The loss of these memories is termed respectively, word-deafness, word-blindness, and agraphia, and when it exists there is impairment of the word-image. A word, he said, is simply employed to express thought, and thought

precedes language. The word added to the mental image of a thing, which in the case of a pen has size, shape, and thickness and conveys the idea of writing, makes the conception communicable to others, but it is not essential to the idea. In a diagram displayed by Dr. Starr, of which a bell was the concept, there were seven circles connected with one another, three of which, representing auditory memory, tactile memory, and visual memory, have to do with the idea; while the other four, word-seeing-memory, word-hearing-memory, word-reading-memory and word-writing-memory, have to do with the use of language. Each or all the sensory organs, when called into play, may fail to arouse an intelligent conception of an object; to express this failure the term apraxia is employed. Apraxia is frequently associated with aphasia, and may lay at the base of it. Hence it should be determined by various tests, whether or not the person gives evidence of recognition. He should be watched by his friends to learn if he still has the same appreciation of his food, if he continues to admire pictures, flowers, etc., and if he recognizes perfumes—in short, if bodies any longer awaken ideas in the mind as they did previous to the aphasic attack. Certain varieties of apraxia, as those of word-blindness and word-deafness, have been studied, while others have received little attention. Investigation of the power to recognize and name objects by the touch, taste, and smell would be interesting, but have not yet been undertaken. Of the cases of apraxia which Dr. Starr has been able to collect, the lesion has always been found in the left hemisphere in right-handed persons and in the right hemisphere in left-handed persons; in other words, in the same hemisphere which is the seat of the lesion which produced the aphasia.

Apraxia has as many varieties as there are organs of sensation, and in all cases of aphasia examination should be made for apraxia. It is well known, he said, that lesions of the right hemisphere in right-handed persons, and of the left hemisphere in left-handed persons, do not produce aphasia; and it seems also that memory of objects must be located on the same side of the brain as that which produces speech. In all the cases of psychical blindness which Dr. Starr has been able to collect, the lesion lay in the angular gyrus; in cases of word-deafness it lay in the temporal convolution, and when both word-blindness and word-deafness existed there was a lesion of both the angular gyrus and temporal convolution. Dr. Starr's collection contains forty-five cases, and is larger than any other yet made. The histories of two occurring in his own practice, illustrative of aphasia in which there was word-blindness and word-deafness, were read. Every patient should be tested, he said, as to his power to write voluntarily, to copy, and to write from dictation. Some patients can figure when they have lost power to read and write.

The complete severance of association fibres may, he said, cause disturbance of the mental image. Four cases of deep-seated lesion in the occipital lobe underneath the cortex have been found at death in such a position as inevitably to affect the associated fibres passing to the angular gyrus. If one association tract be impaired, others may remain open, and before saying that the memory picture is lost one should test all channels leading to it. Such acts as reading aloud, writing at dictation, and copying involve association fibres.

In his first case, word-blindness and word-deafness were present in about equal degree. The diagnosis was that of embolism of the terminal branches of the left Sylvian artery. There was no loss of power to write words. In the second case there was also word-deafness and word-blindness, no motor aphasia, no agraphia, but marked impairment of understanding what the patient heard and read. Hearing and sight were normal. The patient did not recover from his sensory aphasia, but died of acute encephalitis.

Dr. W. R. Birdsall remarked that Dr. Starr's reference to disturbance of the musical faculty in some cases of aphasia reminded him of his first case, that of a violinist, who lost power to speak but retained power to read musical notes and to play the violin. He thought Dr. Starr's diagram of the list of cases showed the superior value of pathological observations over physiological experimentation in cerebral localization.

Dr. E. D. Fisher said he felt that it was a question whether or not so-called cases of sensory aphasia could be attributed to a definite local lesion, for the location of the general intelligence being unknown (it might even rest in the entire cortex) it was difficult to say the cortex was not involved. He could not understand how, with our present knowledge, we could say positively that the supposed centers in the cortex were alone involved, and that the symptoms were not due to a lesion in the white matter or connecting fibres. This difficulty was not

easily solved when it concerned sensory lesions, but it was less difficult in motor aphasia

The PRESIDENT said he could recognize the difficulties in diagnosis pointed out by Dr. Fisher. A number of cases were on record in which the symptoms pointed to a definite local brain-lesion while the autopsy showed an extensive lesion, and the contrary.

DR. PUTNAM JACOBI thought the diagram was incomplete in picturing only memory centers of nouns or verbal expressions, and leaving out of account the higher center for the idea.

DR. A. H. SMITH, when studying a case of aphasia, thought the condition present might be described as "psychical incoördination."

DR. STARR, in closing the discussion, said that he regarded no one center as necessary for the concept "bell," which was the object figured in the diagram; that the image was made complete by the auditory, visual, and tactile centers, and that any disturbance of these, or of their connecting tracts, would make the concept imperfect or destroy it completely. But if there was one center for the idea, a lesion in that limited area, not involving the others mentioned, should entirely destroy the mental image; but no pathological findings went to support such a view.

FOREIGN CORRESPONDENCE.

LETTER FROM BERLIN.

(FROM OUR SPECIAL CORRESPONDENT.)

Inhalation of Heated Dry Air in Consumption.—Effects of Heated Damp Air in Consumption.

BERLIN, Oct. 12, 1888.

The chase of medical men after satisfactory treatment of tuberculosis has well-nigh assumed the character of a craze. National vanity, besides, seems to have spurred the German profession not to be outdone by the French clinicians, who, like Bergeon, Dujardin-Beaumetz and Germain Sée have recently surprised the professional world by their wonderful "cures" of consumption. But by some strange coincidence "the Yankees" have again asserted their traditional prerogative in the way of discovery. Dr. Weigert, of Berlin, who was the first to hit upon a new and successful method of treating consumption, turns out to be an American. But, as such merit and precedence could not very well be allowed to an American physician, Dr. Halter has presented his claims to priority. The new principle of treatment consists in the *inhalation of heated, dry air.* Dr. Weigert appears to have sustained his claims, and the most prominent secular journals have finally taken his part. As the result of this an article appeared in some journal, in which Dr. Weigert's assumption of addressing the Berlin physicians by the epithet of "colleagues" was stigmatized, Dr. Weigert being merely a "Philadelphia doctor." To be a Philadelphia doctor, it needs to be explained, means in Germany to be an impostor and a swindler who has simply bought his diploma. There is actually scarcely a week passing, but some paper publishes an article against some alleged "Philadelphia doctor." To rectify this matter your correspondent has transmitted to the *Berliner Tageblatt* a polite note explaining that the "Philadelphia University" *alias* Buchanan & Co., has long ago ceased to exist, and that Philadelphia is justly considered as the centre of American medicine, having three regular medical schools of first-class standing, besides a Woman's College, a Homœopathic School, and a Polyclinic. Singularly enough no notice whatever was taken of this communication. Your correspondent, however, will not be satisfied until both the German profession and the public are in possession of the truth concerning medical affairs in Philadelphia. It will be of interest to Philadelphians to learn that Prof. Da Costa's book on diagnosis is the official text-book at the Royal University of Berlin, and that the names of Gross, Mitchell and of several other Philadelphia physicians are household words among the German profession.

The favorable results obtained by Dr. Weigert with inhalations of superheated dry air have led Dr. Krull, a practitioner of Güstrow, Mecklenburg, to try the effects of *damp heated air in consumption.* His experiments, however, date back two years and a half. Krull has just published a paper on the cure of consumption by inhalations of damp, warm air, of a constant temperature. The author is quite right in saying that the sanguine anticipations in regard to all antibacillary methods of treating tuberculosis have been a failure. Even Sommerbrodt's creasote treatment has not proved a success. Krull's plan is to abandon wholly the antiparasitic principle and to return to old principles by new means. The basis of his

treatment is the view that a defective nutrition of the lungs favors the admission and development of pathogenic bacteria, and that by directly increasing the blood supply and vital energy of the lungs, the local powers of resistance and recuperation can be considerably increased. This desideratum Krull attains by means of inhalations of sterilized, damp, atmospheric air, the temperature of which can be regulated by mechanical devices. The result of introducing into the lungs damp air of a higher temperature than that of the body is a vascular dilatation, and the passage of a greater quantity of blood through the lungs without concomitant cardiac excitation. As damp air heated to a definite limited degree does not decrease the elasticity of the blood-vessels, each cardiac contraction carries off the quantity of blood admitted previously to the part. It is evident that through this increased admission and expulsion of blood a greater quantity of it will be propelled into the capillaries of the lungs, and that an augmented oxidation of blood will take place in a given time. Simultaneously, the discharge of carbonic acid gas is increased and the processes of pulmonary nutrition and general tissue-change are stimulated. Thus it is possible to check, even in an already affected lung, the progress of the affection, by rendering the still healthy part more capable of resisting the propagation of the tubercle bacillus. Restoration may then take place, either by resorption or by vascular new formation. This recuperative tendency of the lungs is also favored by the water, which in the form of vapor has entered the lungs simultaneously with the hot air and tends to soften and expel cheesy deposits. Possibly the hot air exercises also a deleterious influence on the development of the bacillus. Strange to say, as Krull's observations have shown, the danger of pulmonary hemorrhage is not only not increased by these hot inhalations, but they, by equalizing dangerous centres of blood-stagnation, actually diminish it. Krull has constructed an apparatus for the convenient inhalation of sterilized, damp, hot air. In using it, the patient rests his arms in arm-slings and applies his mouth to a mouth-piece attached to the apparatus, compressing at the same time with his finger the alæ of the nose.

Krull has also experimented with these inhalations on a large number of healthy and tubercular subjects, and has obtained such favorable results as to attract the attention of all practitioners of medicine to his treatment. The inhalations produce no tendency to cough, are pleasant and never create a laryngeal or bronchial catarrh. Cardiac excitation was also never observed. A healthy person gained under this treatment two pounds a week. A tubercular woman, 18 years old, had at the end of Krull's treatment gained twenty-six pounds in all. The best results have been obtained with air heated to 103° F., and by one inhalation daily between 7 and 8 A.M. or 5 and 6 P.M., and lasting thirty or forty minutes. If syphilis or albuminuria is present, Krull's treatment is useless. The most satisfactory results, as would be expected, are obtained in the very beginning of tuberculosis, even of an inherited character. It is to be hoped that more extended clinical trials of Krull's treatment will establish their therapeutic worth.

PERISCOPE.

Saccharine in the Adulteration of Food.

MM. Brouardel, Pouchet and Ogier have been investigating the employment of saccharine as an adulterant of food. They conclude that (1) saccharine is not a food and cannot replace sugar; (2) its employment in the food suspends or retards the transformation of starchy and albuminous substances in the digestive tube; (3) substances containing it, therefore, cause great disturbance of digestion, and are calculated to multiply dyspeptic troubles; (4) its employment in food is still too recent to enable one to determine with precision the consequences of its daily use; but, for the present, it is established that its use has an injurious influence upon digestion, and that the committee is right in concluding that saccharine and different preparations of it ought to be prohibited from food.—*Bulletin Médical*, August 18, 1888.

Reaction of Urine Containing Salicylic Acid.

Pollatschek (*Wiener med. Wochenschrift*, No. 21, 1888) directs attention to the strong reducing property of urine passed after the use of salicylic acid, when this urine is heated with Fehling's solution; it causes a deceptive resemblance to the sugar reaction. This reducing property of salicylic acid was first discovered by Fleischer.—*Centralblatt f. d. med. Wissenschaften*, September 1, 1888.

Case of Poisoning with Antifebrine.

J. Meyer (*Therapeutische Monatshefte*, No. 5, 1888) reports a case of poisoning with antifebrine. The subject was a man 38 years old, disposed to attacks of catarrhal bronchitis, who was at the time suffering with an attack of migraine. A druggist of Berlin gave him two doses of antifebrine, each containing thirty grains, which the patient took within twenty-four hours. The first dose was well borne, but about fifteen minutes after taking the second dose, symptoms of poisoning manifested themselves. The latter consisted in cold sweat, feeling of great prostration, anguish, palpitations, very small and frequent pulse. By and bye a slight cyanosis spread over the face, lips and hands.

The patient was given a cup of black coffee, followed by castor oil; sinapisms also were applied. The cyanosis gradually disappeared. The other toxic symptoms subsided but slowly, and for several hours the patient felt dejected.—*Gazette Médicale*, August 25, 1888.

Uræmic Convulsions Following Post-Scarlatinal Nephritis.

Dr. James Mason, in a communication to the *Lancet*, July 14, 1888, says that although the following case presents little novelty either in its clinical features or in the treatment adopted, still a summary of its salient points may not be entirely without profit. It illustrates, among other things, he says, that even when the greatest care is taken post-scarlatinal dropsy may occur, and also that even in what are apparently most hopeless cases recovery may take place. It is further interesting, he says, as illustrating how careful one ought to be in adopting the *post hoc, ergo propter hoc* method of deduction.

The patient, a boy about eight years of age, suffered, along with the other members of a large family, from scarlet fever. Fourteen days after the rash had disappeared œdema of the eyelids and hands was observed. There was a considerable quantity of blood present in his urine, for which hazeline (a distillate from hamamelis Virginica), among other drugs, was tried, but without obvious benefit. The usual fomentations were applied, and he had several hot baths; but on the fourth day after the appearance of the œdema he was seized with a convulsive fit, the clonic spasm being, however, entirely confined to the left side. On being called, Dr. Mason at once gave him a hot blanket bath, and injected an eighth of a grain of pilocarpine over the deltoid. Although free perspiration soon followed these agents, the stertor seemed to increase and the coma to deepen. After consultation it was decided to try venesection. The median basilic vein was opened, but so altered was the blood and so weak was the circulation that only a few drops of thick treacly fluid escaped. After trying various ineffectual means to increase the flow, the incision was covered up and the boy was left to die. Next morning, however, he was laughing and chatting with his brothers, who were convalescing from scarlet fever, and in three weeks more he was fit to go to the seaside.

Dr. Mason remarks that had he obtained a free flow of blood from the boy's arm, he certainly would have been inclined to credit the venesection with the cure, and, reasoning from that, would have been more inclined to adopt that practice in any similar case. The moral to be drawn is obvious.

Purgative Action of the Galvanic Current.

Some time ago, Dr. Schildbach published a paper containing the following statements, based on some experiments of his own: 1 A moderately strong galvanic current (cathode in the rectum, anode on the abdomen) gives rise to vivid peristaltic movements of the intestines. 2. A sitting of 10 or 15 minutes is followed by stools in one or two hours. To verify Schildbach's assertions, Dr. A. Chelmonski, a Polish practitioner, has recently undertaken a series of experiments in two healthy persons and in eight patients with habitual constipation. His results, as described in his communication in the Warsaw *Gazeta Lekarska* (1888, No. 19), may be condensed thus: 1. In 9 out of 10 cases, the sitting was followed by defecation in from fifty minutes to twelve hours, the stools being of a gruel-like consistence. 2. In 4 of the 9 cases, the stools were followed in two hours by diarrhœa. 3. In 3 of the 10 cases, during the electrization, there were observed facial pallor, extreme weakness of the pulse, perspiration, giddiness, and aural noises; while in one case a true syncope supervened. Dr. Chelmonski's general conclusions are to the effect that the laxative effects of the current are not so rapid and satisfactory as Schildbach alleges, and that the current sometimes manifests an unpleasant influence both on the intestine and heart.

Syphilitic Ulcer of Anus.

Dr. Mark F. Patten, of San Buenaventura, Cal., reports an interesting case of this affection in the *Pacific Med. and Surg. Journal*, August, 1888. A young man, 17 years old, consulted him February 9, 1888, with the following history: Five weeks previous, while in Los Angeles, he was obliged, on account of the scarcity of lodgings, to occupy a bed with a man who was a stranger to him. In the middle of the night he was awakened by his bed-fellow, who was in the act of committing an assault upon him. On his resisting and making an outcry, the man choked him, relieved him of his watch and money, and then decamped. Three weeks after this a sore appeared at his anus, which became exceedingly painful, and it was for this that he consulted Dr. Patten.

On examination, the latter found a large ulcer involving one-half the circumference of the anus, with edges well defined and somewhat indurated. It was very sensitive to touch, and defecation caused great pain. There was also slight enlargement of one of the inguinal glands. It was a question whether this was a case of syphilis or not, and if it were not for the rapid growth of the anal ulcer and the increasing painfulness of defecation, Dr. Patten would have waited for secondary symptoms to become manifest before resorting to specific treatment. He, however, thought it best to place him on a mercurial (bichloride) course at once. In one week, he says, the anal ulcer was entirely healed. The mercurial did not retard or prevent the development of secondary symptoms, as on the forty-seventh day after exposure to infection his body became covered with a typical syphilitic roseola.

Influence of Antipyretics upon the Retention of Glycogen.

MM. Lépine and Porteret have been studying the effect of antipyretics upon the glycogenic function, and have already announced that they retard the transformation into sugar of the hepatic glycogen. In subsequent investigations (*Gazette Hebdomadaire*, August 24, 1888) they have sought to determine the influence exercised by antipyrine and antifebrine upon the proportions of glycogen. After having described their method of procedure with the purpose of eliminating error, and stated that it is indispensable in a study of this kind that the animals experimented upon should be of the same litter, differing little in weight and in the same condition of nutrition, they announce the results they have obtained. Their conclusion is that animals poisoned with antipyrine and antifebrine have, in comparison with healthy animals taken as tests, an excess of muscular glycogen of 28 to 20 per hundred—a fact that is not without importance as bearing upon the theory of the action of antipyretics.

Treatment of Ulcers of the Cornea.

At the meeting of the American Ophthalmological Society, September 19, 1888, Dr. P. A. Callan, of New York, read a paper on the treatment of ulcers of the cornea. Ulcers occurred in young persons, and were often phlyctenulæ of the cornea, in which neglect and lid friction had caused absorption and an ulcer. A salve of the yellow oxide of mercury should be placed between the lids once daily; atropine and cocaine should be used, if necessary; and also tonics and open-air exercise, regulated diet and airy sleeping-quarters, smoked glasses, but no bandages or dark room. For ulcers due to conjunctivitis, that affection should be treated. In gonorrhœal ophthalmia, ophthalmia neonatorum, or granular conjunctivitis, efforts should be redoubled when the cornea is threatened—cutting the canthus, applying leeches or ice compresses, etc. Referring especially to ulcers without apparent cause, due to some constitutional trouble—malaria, syphilis, etc.—the author said that the constitutional remedy should be employed, and, under cocaine, the ulcer cleansed with a piece of absorbent cotton wrapped on a holder. Then, with another piece of absorbent cotton, it should be swabbed with a two-grain solution of nitrate of silver, leaving no part of the ulcer untouched. This might have to be repeated two or three times in as many days. The eye should be bathed with hot water (120° to 130° F.), for half an hour, three times daily. If much corneal irritation existed, the cornea should be bathed with a boric acid solution; then atropine and cocaine used, and the eye kept bandaged. The point to be aimed at is to get a clean wound, and this is obtained better and more safely, he said, by use of the nitrate-of-silver solution than by any other means known to him. Besides clearing the ulcer, the nitrate of silver stimulated repair.

Dr. W. F. Mittendorf, of New York, thought the electro-cautery should be used on sluggish ulcers and on those inclined to spread rapidly, with sloughing edges.—*N. Y. Med. Journal*, October 6, 1888.

Case of Dextrocardia.

The *British Med. Journal*, July 7, 1888, says that at a meeting of the "Ateneo" of Brescia, Italy, June 3, Dr. Emanuele Anselmi showed a case of dextrocardia in a young man. The right side of the thorax was far more prominent than the left, and the muscles covering it were much more developed. The apex-beat was close to the sternal end of the fifth intercostal space of the right side. The relative position of the ventricles was unchanged, and the great vessels were not transposed; the heart in fact was as if it had been forcibly pushed over to the right, so that being unable to move downward on account of the liver, it had gone forward, bulging out the ribs to make room for itself. The great vessels appeared to have undergone a twist, or rather a more marked curve than usual, for the blood reached the radial arteries on both sides after a longer interval than the normal one, and the second sound of the heart was somewhat unnaturally strong. The patient had never had any symptoms referable to the heart except after excessive physical exertion, and physical examination failed to reveal anything wrong either in that organ or in the lungs. Dr. Anselmi was inclined, in the absence of any history of disease which might have caused dislocation of the heart, to attribute the malposition to some inflammatory affection occurring during the embryonic period.

Microkinesis.

A paper by Dr. Francis Warner, on muscular movements in man and their evolution in the infant, was read at the meeting of the Royal Society, June 12. In the newborn infant continual movement may be observed in all parts during the waking state; these spontaneous movements, to which Dr. Warner proposes to apply the term "microkinesis," cannot be stopped by external stimuli. This condition becomes gradually modified during the growth and development of the child, and the movements are gradually more and more controlled by external stimuli, while the phenomena termed memory and imitation are evolved. The paper also contained a study of the modes of action of nerve-centres in adult age, and it was suggested that when a co-ordinated movement follows a slight stimulus, temporary unions are produced among the centres, and that the brain-action corresponding to thought is the formation of functional union among cells; the outcome of such functional unions is seen in the movements which express the thought. Dr. Warner described a number of special postures and movements associated with certain states of the brain, and in fact affording physical signs by which those states might be recognized.—*British Med. Journal*, June 30, 1888.

Medicines Excreted by the Bile.

Prevost and Binet (*Revue méd. de la Suisse Romande*, May 20, 1888, made biliary fistulæ in two dogs, and investigated experimentally the action of drugs upon the secretion of bile, and their excretion by the bile. Their results are as follows: 1. Although fat is not decomposed on account of the absence of bile from the intestinal canal, the animals experimented on continued to be well nourished. 2. The quantity of bile secreted increases considerably in proportion to the food ingested, especially when the latter is rich in peptones, less when it is rich in fat. Ingestion of water increases the secretion of bile if the quantity of water exceeds seven fluid ounces. Agents which increase the secretion of bile are: gall itself in its natural state or in the form of a glycerine extract, bile salts, urea, oil of turpentine, terpinol, potash, benzoin, salicylate of soda, salol, muscarin. The following increase the secretion only in an insignificant degree: bicarbonate of soda, sulphate of soda, chloride of sodium, Carlsbad salts, propylamine, antipyrine, aloes, cathartic acid, rhubarb, hydrastis Canadensis, ipecacuanha. The secretion of bile is lessened by iodide of potash, calomel, iron, copper, atropine, strychnine. Phosphate of sodium, bromide of potash, chloride of lithium, corrosive sublimate, arseniate of sodium, alcohol, ether, glycerine, caffeine, pilocarpine, kairine, cytisus, senna, colombo—were without appreciable influence upon the secretion.

Of the agents ingested the following could be detected in the bile that escaped through the fistula: turpentine, terpine, terpinol; salicylic acid (also found after salol was given), bromide and iodide of potash, potash, arsenic; iron, lead, mercury (these three in traces); caffeine, fuchsine, cochineal, finally gall itself. The gall of dogs becomes of a more greenish hue after ox gall has been given, and smells then like ox gall. Moreover, glycocholic acid can then be detected in dog's gall, although this is never found normally in the latter, but is always met with in ox gall. The following agents were not detectable in the bile: antipyrine, kairine, hippuric acid, strychnine, copper, lithium, urea.—*Wiener med. Presse*, July 29, 1888.

THE

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ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D., EDITOR.

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Write in ink.
Write on one side of paper only.
Write on paper large letter size.
Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate, or omit words like "the," and "a," or "an."
Make communications as short as possible.
NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

MEDICAL LEGISLATION IN TUNIS.

The attention of the medical profession in the United States has of late been strongly directed, in the State and National Societies, to the necessity for the adoption of wise and uniform laws for the regulation of the practice of medicine. For this reason we think it may be useful to give an epitome of the laws in regard to this subject which have recently been promulgated in Tunis.

These laws make the following provisions:—

Since July 15, 1888, no person can practice medicine, in any of its branches, in Tunis except under the following conditions: Every person intending to practice medicine must, within one month of fixing his or her residence, declare this intention, in writing, to the civil "controller," and deposit a diploma entitling him or her to practice in the country in which it was issued. This diploma will be examined, and, if found correct, will be returned, with a certificate authorizing its possessor to practice. In case of removal from one district to another this certificate must be registered with the local "controller," within one month.

The names of all persons entitled to practice are to be published at the beginning of each year in the *Journal Officiel Tunisien.* Persons authorized to practice must do so only in the districts to which their certificates apply.

No person may practice medicine and pharmacy at the same time; but any physician may sell medicines if he resides in a district in which there is no authorized pharmacy.

Every person is regarded as practicing medicine who habitually gives advice, or professes to give advice, for a salary or gratuity, or as to a method of treatment, or the use of any substance which he represents as capable of curing disease, or who practices manipulations or operations having the same object, or who practices midwifery.

Every violation of this law is to be punished with a fine of from ten dollars to one hundred dollars. If the violation is accompanied with usurpation of a title, the fine ranges from twenty dollars to two hundred dollars. If the offense is repeated, the fine is doubled and an imprisonment, not exceeding three months may be added. Prosecutions may be instituted by official action, or at the request of any person authorized to practice, or by any medical society, and the latter have the right in any case to *bring a civil action for damages against the offender.*

The only persons exempt from the provisions of the preceding laws are, 1. persons who have already practiced for five years in Tunis, and *who can show that they have studied medicine for at least three years in a*

medical school. Every year of such study in excess of three is to be counted as equal to a year of practice in Tunis.

2. Natives at least sixty years old, who have practiced medicine for twenty years, and those who are at present possessed of an "amra" from the Bey.

3. Natives who practice in places or tribes where there is no one possessing a legal title to practice.

4. Women now practicing midwifery: who may continue to do so, if they apply for permission within two months.

None of the persons thus exempt may practice any operation, except of minor surgery, nor may they be called as experts, or give medical certificates, or assume the title of "doctor," or any other which would lead to the belief that they have a certificate of authorization to practice. Women who practice midwifery may not perform any obstetrical operation or prescribe medicines, and in case of difficult or protracted labor they must summon a legalized practitioner.

The rights conferred by this exemption may be revoked for good cause and shall be revoked in case of a conviction for practicing illegally.

In studying the provisions of the law we have just epitomized, our readers will probably be struck with the high standard which they set up for the practice of medicine in Tunis, and they will perhaps think that this standard is hardly attainable in our country. This may be the case; but we hope that they may furnish some useful suggestions to those who hope to influence medical legislation in America, and that their manifest consideration for the rights of the natives, as against the claims of those who may wish to make a living by practicing medicine upon them, may not be overlooked.

We think our legislators might do worse than to adopt the provisions of the Tunis law bodily, and we sincerely hope they may at least come near them when they act upon this important subject.

WHOLESOME RECREATION.

Not many weeks ago Dr. J. T. Rothrock, Professor of Botany in the University of Pennsylvania, returned from a visit to the coast of Maine, in which he had carried out with great success an idea of his for making a summer vacation furnish to a number of boys recreation, instruction and improved health. Most of the time was given to sailing and fishing. A considerable portion was spent on an island, where the boys could not indulge in long walks, but where they had abundance of opportunity for moderate muscular exercise. In the evenings they had lectures upon such emergencies as may occur at any time among boys—being shown how to resuscitate a boy taken out of the water insensible, how to treat a case of sunstroke, how to get a boy home with a broken limb, how to stop the bleeding from a cut artery, how to reduce certain dislocations, how to apply bandages, etc. Commencing with the head, they went over the entire body, being taught how to apply these lessons as occasion might arise. The leading idea was to make the excursion a vacation and not a school, hence all instruction was confined to the evening. Whilst its headquarters were on the island, the party cruised as far north as Mount Desert, making in all a cruise of about ten days. The only supervision that was exercised over the boys was simply enough to keep them out of harm's way. As might be expected from Dr. Rothrock's chief line of study, rather extensive collections of the flora of the region visited were made, and interesting matters of local history and natural science were also studied.

We do not mention this enterprise simply to praise it, but rather to commend it to imitation. Under a judicious leader an excursion of this kind could not fail to be of service every way, to young people, or indeed to people of any age; and what has been done by Dr. Rothrock may furnish a suggestion to many of our readers which they could carry out with the greatest

pleasure and advantage to themselves and those who enjoy their professional care.

THE CLAIMS OF THE BODY.

Now that the schools have opened again, it may be worth while to call the attention of those who govern them to the opinions of medical men as to the way in which school children should be treated. It will hardly be claimed that physicians are indifferent to the mental development of the rising generation, and yet they are continually found protesting against the way in which schools are conducted. The number of hours during which children in the public schools of the United States are compelled, or incited, to study are too many; and medical men are practically unanimous in the opinion that they should be curtailed.

Dr. Hammond, of New York, has recently called attention to the error of overloading the minds of school children, and repeated certain arguments which have been advanced over and over again against the system of cramming to which, in spite of many praiseworthy efforts of wise school directors, a large number of scholars are subjected.

But we would go further than he does, and urge the deliberate and systematic cultivation of physical health in all well-ordered schools. In our day there is a wholesome tendency, all over the civilized world, to regard mental culture less exclusively than our fathers regarded it, and to attach more importance to the needs of the body than they did. But even yet we may improve, and perhaps some day we shall reach the point when the possession of a healthy body shall be recognized as indispensable to a perfectly healthy mind, and when it shall be fully understood that a healthy body with a moderate education is infinitely preferable, for the individual and for the race, to a highly cultivated intellect with a wretched physique. This may sound to some like the praise of purely animal excellence; but we believe that a sensible view of the matter will inevitably lead to the conclusion that the mental and moral prospects of the human race will be improved with every improvement of its physical powers, and that the outlook for the future is brighter now than it ever was, because medical men are asserting the claims of the body for thoughtful consideration, and the community seems to be taking their teachings to heart. We have no fear that the minds of those who follow us will be neglected, and it is encouraging to find that their bodies are more and more regarded as worthy of attention.

A practical application of these thoughts may be suggested, namely, that physical education should be made a part of every organized system of general education. And we believe that this can be best done under the supervision of medical men. Every school in America should have the services of a physician, first, to examine the pupils in regard to their ability to pass through the prescribed curriculum without injury to their health, and, second, to direct the measures designed for the development of their physical strength.

Such an adviser should especially superintend any system of gymnastics which may be adopted, and see that the scholars are encouraged to indulge in recreations and sports which strengthen the vital functions. He should be a sort of cultivated trainer, to make those under his care strong men and women physically, and to supplement from his side the endeavors of the teacher to develop their mental faculties. This combination is, in our opinion, necessary for an ideal school, and to this we sincerely wish that all our schools may come.

MEDICAL POLICE SERVICE IN PHILADELPHIA.

Dr. Thomas H. Andrews, Police Surgeon of Philadelphia, has recently secured the adoption of regulations which will very much ameliorate the lot of those who come under the care of the police in conditions of sickness or injury, of body or mind. Formerly the division of authority in the

government of the city led to delays in the treatment of this class of unfortunates which were always troublesome and sometimes disastrous. Under the present form of government, it has been possible to make the different city departments work harmoniously and to reduce to the shortest possible limit the time necessary to transfer a sick, or insane, or injured person to the proper hospital.

At the suggestion of Dr. Andrews, Mayor Fitler has authorized the issuing of orders requiring the immediate reception at the Philadelphia Hospital of any patient sent there by the police surgeon's direction. Chief of Police Lamon has given instructions to the lieutenants, and Dr. Andrews has issued a circular letter to the district surgeons notifying them that when any sick or insane person, with no one to take care of him or her, was brought to the station house, the lieutenant would give notice immediately. This takes from the lieutenant, and assigns to the district surgeon, the duty of judging whether a "prisoner" is intoxicated or sick. The district physicians are to answer the summons at once, and if, in their judgment the patient needs hospital treatment, he is to be sent to the Philadelphia Almshouse without delay.

These arrangements have so far worked admirably; they have relieved the police of much responsibility and have proved of great advantage to those who come under their care.

Both Dr. Andrews and the Mayor of Philadelphia are to be congratulated upon the carrying out of this much needed reform, and we trust it may prompt the authorities of other cities to adopt similar humane and intelligent measures of medical police service.

—There were 23 new cases and 2 deaths from yellow fever in Jacksonville, Fla., Friday, October 26. The total number of cases up to that date has been 3997, and the total number of deaths, 341; a mortality of about 8¾ per cent.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

A SYSTEM OF OBSTETRICS BY AMERICAN AUTHORS. Edited by Barton Cooke Hirst, M.D., Associate Professor of Obstetrics in the University of Pennsylvania, Obstetrician to the Philadelphia and Maternity Hospitals, etc. Vol. I. Illustrated. One colored plate; 309 engravings on wood. 8vo., pp. 807. Philadelphia: Lea Brothers & Co., 1888.

This work is issued in connection with the System of Gynecology by American Authors, and is intended to furnish a complete exposition of the science of obstetrics, and embody the knowledge of well-recognized authorities in the profession in this country, whose teaching is especially adapted to our own conditions and surroundings. Volume one is made up of eight papers by different writers. The distinguished reputation of its contributors will insure the work a wide distribution in this country; and as the most comprehensive American treatise upon obstetrics, it must be sought for abroad as containing distinctively American views upon the art as well as upon the science of obstetrics.

Engelmann, of St. Louis, contributes the introductory paper, on the history of obstetrics. This contribution is of the same high order that has characterized the other writings of this author. No inconsiderable part of this paper is the result of original investigations concerning the obstetric customs and practice among primitive peoples. Toward the end of the article will be found convincing evidence of the great advances which have been made in scientific obstetrics, and of the benefits which have accrued to mankind from the application of scientific knowledge to the obstetric art. This is especially true of antiseptic midwifery. This section will be read with interest and profit by all who are called upon to practice obstetrics. The Editor is to be commended for having selected a scientist—Martin, of Johns Hopkins—to write the chapter on the physiology and histology of ovulation, menstruation and fertilization, and the development of the embryo. The standing of the author affords ample surety of the intrinsic worth of the contribution. The Editor, Dr. Hirst, contributes the paper on the fœtus, its physiology and pathology, which is very much more complete than that usually found in works on obstetrics. Having signified our opinion of the article as a whole, we wish to refer particularly to one subject—the management of cases of abortion with retention of the placenta. Our author enters very fully into the status of this question, both from the scientific standpoint and from that of authorities. His advice in general is most excellent, and, in the opinion of the reviewer, is to be commended, especially in that he advises to use the finger in preference to any mere instrument to separate adherent placenta from the uterine wall. Immediately afterward, however, Simon's spoon-curette is recommended for the removal of the thickened decidua which remains after early abortions. Aside from the question of the necessity for the artificial removal of this tissue, the method here recommended is certainly dangerous, and is not in accord with the views of American obstetricians—not excluding those who believe in the "active treatment" of incomplete abortion, as distinguished from the "expectant treatment." While some, as Goodell, entirely reject the use of the

curette after abortion as inefficient, and at the same time dangerous, others, and perhaps a larger number, advise it under certain circumstances, but are at the same time emphatic in specifying the *dull* curette, perhaps of Thomas or Mundé; and they are equally outspoken in condemning the use of the sharp instrument, as being likely to cause injury, if not perforation of the uterus. Indeed, our author reports such a case as having occurred in Berlin, resulting in death to the victim, and imprisonment to the physician.

The chapter on the physiology and pathology of pregnancy, by Jaggard, embraces one hundred and fifty-six pages, and is one of the most complete and thoroughly satisfactory in the book, and indeed in any English work. It certainly reflects great credit upon its author, who is one of our younger obstetricians. The section on the physiological and clinical phenomena of natural labor, the conduct of labor, and the physiology and management of puerperal convalescence, is by Busey. The important and purely practical chapter, on the mechanism of labor, and the treatment of labor based on the mechanism, is contributed by Penrose. This author has the happy faculty of saying what he means in such a way that the reader cannot misunderstand him. The contribution is a clear exposition of the views of its distinguished author upon the subjects treated, and as such will be welcomed, not only by his many former students, but by the profession at large. However, in a work which aims to be exhaustive, the reader expects a full presentation of the subject, when theories conflict, and it is disappointing to be referred to other works for the desired information.

The chapter by Reeve on the use of anæsthetics in labor is a complete presentation of this subject. The author pronounces in favor of chloroform as *the* anæsthetic for use in labor, considering it to be as safe as any other, and far more manageable and pleasant. The Editor adds a section on the use of ether in obstetric practice, in which he advocates this agent as "most satisfactory to the obstetrician if used with skill and judgment." Being convinced of the superiority of chloroform, not only by the able presentation of the matter by Reeve, but also by practical experience with both agents, we cannot accept the latter statement—except in those rare instances in which it is desirable to push anæsthesia to the surgical degree. Parvin's erudite contribution on the anomalies of the forces in labor is the concluding section of the first volume. The many original illustrations, taken largely from specimens to be found in Philadelphia museums, are a feature of the book of no mean value. The work of the publishers could hardly be improved upon. Doubtless volume two will be equal in merit to volume one, and both will form an important addition to English obstetric literature.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

Moral and Criminal Responsibility. By P. Bryce, M D, Tuskaloosa, Alabama. From the *Alienist and Neurologist*, July, 1888. 22 pages.

The Appendix Vermiformis, its Function, Pathology and Treatment. By Henry H. Smith, M.D., Philadelphia. The Diagnosis of Peri-cæcal Abscess, and its Treatment by Removal of the Appendix Vermiformis. By Thomas G. Morton, M.D., Philadelphia. From the *Journal of the Amer. Med. Association*, June 9 and 16, 1888. 44 pages.

—Dr. Bryce's paper on the moral responsibility of criminals is exceedingly interesting and instructive. He is so firm a believer in the controlling influence of hereditary tendencies and surrounding circumstances that he does not hesitate to say that criminal acts have no moral aspect whatever, so far as the criminal is concerned. At the same time he distinguishes between what is called moral responsibility and legal responsibility, holding that the State should restrain or punish criminals, as the occasion may demand, for the protection of society, and suggesting special methods and special judicial machinery for dealing with peculiar cases. His paper is full of interest and instruction, and while those who study it may not agree with all of his opinions, they cannot fail to find in it food for profitable reflections.

—This interesting pamphlet contains papers read by Drs. Smith and Morton before the Surgical Section at the last meeting of the American Medical Association. Dr. Smith's paper gives an admirable summary of the anatomy and physiology of the vermiform appendix, and of the pathological changes to which it is liable, together with a sketch of the symptoms of appendicitis and the treatment appropriate to it. The latter is brief but excellent, and places in a thoroughly scientific light the relative importance of medical and surgical treatment. An interesting feature of Dr. Smith's paper is the mention of writers and surgeons who long ago presented views in regard to the appendix and the treatment of its diseases which are apparently unfamiliar to many who write and speak about them nowadays, and which anticipated many opinions which are usually regarded as novel.

Dr Morton's paper discusses the surgical treatment of peri-cæcal abscess, and advocates removal of the appendix when—as is often the case—this is dependent upon disease of the latter. Those of our readers who read the Reporter of January 7, 1888, have already an idea of Dr. Morton's views on this subject, which are more fully elaborated in the present paper.

To all of our readers we can heartily recommend a careful perusal of the pamphlet before us, which gives an excellent summary of the present state of knowledge in regard to a most important and very common disorder.

Literary Notes.

We have received Volume IX of the *Index Catalogue of the Library of the Surgeon-General's Office*, U. S. Army. This volume extends from Medicine (popular) to Nywelt. It contains 13,151 author-titles, representing 6,834 volumes and 12,818 pamphlets It also includes 9,999 subject-titles of separate books and pamphlets, and 29,120 titles of articles in periodicals. Like its predecessors, it reflects great credit upon the editor, Dr. Billings, and is an evidence of the wise liberality of the National Government.

CORRESPONDENCE.

Professional Cowardice.

TO THE EDITOR.

Sir: The purport of this communication is to inform Dr. W. R. D. Blackwood of your town, that he is living in advance of his age. The subject upon which he writes so bravely and sensibly in the main, is tabooed.

Some years since a short paper of mine on "The Limitation of Families" was published in a prominent medical journal, and while possessing no special merit or originality in itself, seemed to interest the medical profession immensely. I have now in my possession, a large pile of letters coming from all sections of the country, from Maine to Texas, as a result of that communication, in which I took substantially the same grounds as has Dr. Blackwood. They were mostly from physicians, of course. But quite a number came from laymen and women and they were invariably commendatory.

The prevalence of evil practices was admitted and deprecated and the universal request for information as to how this prevention could be accomplished, was noticeable.

As a matter of course I had nothing absolutely new to recommend; but having tried to inform myself concerning all the approved, safe and certain methods, I wrote a second article in which I described *the* method which in my hands has proved efficient—which I have recommended for many years and do so recommend still, and which has, if carefully followed out in detail, invariably given satisfaction—and what was the result? I have yet the letter from the editor of the aforesaid journal in which he says, at least this is the purport, if not the exact wording:

"There is no fault to be found with the plan you recommend, but we question whether the time has yet come to describe so boldly, even in a medical publication, these *very specific* instructions for limiting progeny; and while we do not absolutely refuse to publish your article, we deem it best as a matter of *policy* in deference to *public opinion* to withhold it for awhile."

It is not necessary to add that it was never published, and to this day I have been annoyed by the clamor my professional contemporaries kept up in order to find out how to prevent conception, "*tuto, cito, et jucunde.*"

That information, I am apprised, is not timely, nor decorous, nor in accordance with the spirit of the nineteenth century; therefore I withhold it.

But I denounce such false modesty, and I protest, with all my might, against a squeamishness wholly in the interest of crime.

However, I shall get rude and personal if I keep on, therefore a period is the proper punctuation right here.

Very truly yours,

DAVID E. MATTISON, M.D.

Warsaw, N. Y.

Biliousness.

TO THE EDITOR.

Sir: When I commenced practice thirty years ago I frequently heard my neighboring physicians use the terms: "*Bilious,*" *and* "*Torpidity of the Liver.*" In the study of medicine I had never seen those terms definitely explained, and I often wondered what was the true pathology of the condition meant. When I had become more acquainted with those practitioners, and my student-life timidity had worn away, I made it a point to question and cross-question those who made use of these terms in consultation or in medical discussion, as to their meaning. I never got a satisfactory reply from any of them, but received the impression that none of them had any definite idea of what was meant by the terms. I asked one physician, who was a professor of practice in a college of some note, what pathological state he intended when he said "*bilious,*" and he replied: "I do not know; it is a term in common use; but what the true pathology is I never made out. It is a convenient term to apply to cases accompanied by a sallow skin and a general malaise."

Just here is the explanation of their general use. The patients accept the pathology expressed by those terms without any question, and the physician avoids further trouble to investigate the case and writes a prescription with a view to stimulate the liver, and arouse it into action, and gives the case no further thought.

After thirty years of practice I find even well-educated practitioners still using the terms "*bilious*" and "*torpidity.*" The medical journals, too, are not exempt from them to-day, though they are loose, meaningless, and unscientific. Medical students, in their text-books on physiology and pathology, do not meet with them. But soon after getting into practice they learn

them, and find a good use for them, to shield their ignorance. They never drop them, so long as they carry calomel, blue-mass and podophyllin, with which to arouse the *lethargic condition of the liver!*

If one will refer to his physiology (modern) he will learn what the functions of the liver are (so far as are known), and see that "*torpidity*" is a myth. Why not drop the terms, as educated physicians, from the medical nomenclature, or use them among patients as we use Santa Claus with little children? deceiving them, but not deceiving ourselves?

I have found quite a large class of pathological conditions, each requiring different treatment, that may have been designated by those terms, by the careless physician who takes but little pains to investigate his cases, and trusts to luck for the good results of his liver stimulants. Such are: gall-stones, gastric and gastro-intestinal catarrh in its various forms, over brain-work, hard labor with under feeding, various kidney, heart and lung affections, peritonitis (chronic), affections of the pelvic viscera, and numerous other obscure diseases.

Yours truly,
JOHN M. CURRIER, M.D.

Newport, Vermont,
Oct. 9, 1888.

NOTES AND COMMENTS.

Small-pox among the Indians.

Official information was recently received by Dr. Benjamin Lee, Secretary of the State Board of Health of Pennsylvania, from the Secretary of the New York State Board, of the existence of small-pox among the Indians of the Cataraugus and Allegheny Reservations in that State, he at once telegraphed instructions to Dr. J. L. Stewart, of Erie, Medical Inspector to the Board for the Lake District, to visit the Cornplanter tribe in Warren County, the members of which are in constant communication with those of the New York reservations, and take the necessary means for their protection The instructions were carried out with commendable promptness. The entire tribe was vaccinated, and the chief, Marsh Pierce, promised to forbid his people crossing the border, until the disease had disappeared. He rendered every assistance to the vaccine physician and extended the thanks of himself and his people to the State Board for its timely action in their behalf.

A Lay Opinion of Sir Morell Mackenzie's Book.

The conversion by Dr. Morell Mackenzie of his record of the sufferings of his patient, the Emperor Frederick, into merchandise of the lowest kind, and the sale of it to a disreputable sensational Sunday newspaper in this city for a good round sum, strikes us as one of the shabbiest and least professional acts ever committed by a member of a noble calling. A quarrel of doctors over a dead body is always a rather repulsive thing, doubly repulsive when the body is that of a man at whose bedside the whole civilized world watched with sorrow and respect. We can readily conceive, however, that Dr. Mackenzie may have found it necessary to lay before the public a full account of the sickening details of the progress of the dreadful and fatal disease, owing to the assaults made on his professional reputation. We are treated to so many of these clinical horrors, nowadays, whenever a distinguished man dies, that doctors are naturally more and more ready to supply them on small provocation. But surely the vindication ought to have been made in the quietest and most professional way, and addressed as far as possible, in form as well as in fact, to a professional audience only. Does any layman or laywoman whose literary tastes are not thoroughly morbid or depraved care to follow in minute detail the history of a fatal cancer in the throat? But what are we to say of a doctor who makes a sort of popular novel out of the story of his patient's horrible sufferings, and sells it then for a large sum to one of the most enterprising purveyors of nastiness in the world? The arrangement has miscarried through somebody's dishonesty; but it is very rare indeed for a thief to render indirectly such good service to the cause of decency as this one has done.—*Nation*, Oct. 18, 1888.

Artificial Carlsbad Salts.

The fulsome advertisements of these salts in various ways may have tended to obscure the fact that very cheap and effective artificial preparations can be made. One of these is that suggested by Ziemssen:

Sulphate of sodium	40 parts.
Carbonate of sodium	6 parts.
Chloride of sodium	1 part.

This should be dissolved in hot water, then the latter evaporated, the remaining salt powdered, and a proper dose of this (one-half teaspoonful) taken in hot or carbonated water.—*Medical Record*, July 21, 1888.

Medical Legislation in New York.

It is more than probable that additional legislation will be sought from the next Legislature of New York to control the practice of medicine. Mr. W. A. Purrington, counsel for the Medical Societies of New York County and State, recently read a paper before the American Social Science Association on the extent to which legislation can aid medical education. Legislators will do well to study this paper before introducing any new laws pertaining to the subject. Mr. Purrington thinks that a responsible board should be created, which will have in charge the arrangements of quarantine and sanitation, and also the licensing of medical practitioners of every sort; for he contends that the dentist and the pharmacist should be recognized as medical men. All that legislation can do to aid medical education he believes can be summed up as follows:

1. By fixing a minimum age under which they (physicians, dentists, and pharmacists) will not be allowed to practice their calling.

2. By requiring of each of them a fixed term of study of certainly not less than two graded years, leaving to the board the care of details.

3. By requiring proof by examination or certificate that each candidate for license had studied, before beginning his professional course, at least those branches in which law students are examined in this State before they commence their legal studies.

4. By declaring that no medical schools (including in the term schools of dentistry, pharmacy, and midwifery) shall be incorporated by special act, and providing a general law for the incorporation of such schools, only upon proof made of the possession by the incorporators of sufficient capital—say, not less than a hundred thousand dollars—and a teaching plant, to justify the belief that the school will be capable of exercising faithfully its franchise. Such an act should contain stringent provisions for its own enforcement and for the forfeiture of abused charters.

5. A minimum course of medical study should be prescribed, in which a grade of at least seventy per cent. should be attained on examination. The regulation of all details of the examination should be left to the board. But the topics in which the examination should be had might well be specified in the statute. It might be well to omit the topics of therapeutics and materia medica, upon which all medical heresies have been begotten by unscientific minds, inferring that one who should creditably pass his examinations in botany, chemistry, physics, anatomy, surgery, physiology, hygiene, diagnosis, obstetrics, and microscopy, especially if his clinical examination should show him to be educated in a true sense to observe and draw sound deductions from observation, might be trusted to form his own conclusions and pursue his own studies as judgment should dictate in the field of therapeutics. The law can have nothing to do with medical theories. The utmost it can do successfully is to prescribe that none shall practise medicine except persons educated in those branches of science that all admit are essential to an understanding of morbid conditions of our species, and possessed besides of a fair general education.

6. Finally, the law should not recognize any diploma as of itself conferring a right to practise medicine: even if the possession of such document should be required as an antecedent to examination by the health board, it should not be allowed to take the place of such an examination. Any scheme of medical legislation will hereafter embrace that great safeguard against imposture and efficient tracer of frauds, the system of registration, where no one is allowed to practise medicine who has not made a public record, under oath, of his name, origin, and credentials for a license.—*Science*, Oct. 19, 1888.

New Laboratory for Cornell.

The Board of Trustees of Cornell University recently appropriated $80,000 from the permanent funds of the university for the erection of a chemical laboratory. A new chemical building is made necessary by the great increase in the number of students within a few years. The sum thus taken from the permanent funds will be replaced by deducting $20,000 a year for four years after 1890 from the regular income of the university, which is over $3,000,000 a year. Work on the new building will be begun at once. This will make the fourth large building in process of construction on the campus, one of them, the library, costing $225,000. The trustees appropriated $40,000 to complete the new Engineering Building, an imposing brown-stone structure, called Lincoln Hall, in honor of the President, who signed the Morrill Land-Grant bill.

Rewards for Discoveries and Inventions.

The Committee on Science and the Arts of the Franklin Institute, of Philadelphia, Pa., announces the fact that the Committee is empowered to award, or to recommend the award of, certain medals for meritorious discoveries and inventions, which tend to the progress of the arts and manufactures. These medals are:

1. *The Elliott Cresson Medal* (Gold).—This medal was founded by the legacy of Elliott Cresson, of Philadelphia, and conveyed to Trustees of the Franklin Institute. By the Act of the Institution, May 17, 1849, the Committee on Science and the Arts was designated and empowered to award this medal, and the Committee decided to grant it, after proper investigation and report by sub-committee, either for some discovery in the arts and sciences, or for the invention or improvement of some useful machine, or for some new process, or combination of materials in manufactures, or for ingenuity, skill, or perfection in workmanship.

2. *The John Scott Legacy Premium and Medal* (twenty dollars and a medal of copper).—The John Scott Legacy Premium and Medal was founded in 1816, by John Scott, a merchant of Edinburgh, Scotland, who bequeathed to the City of Philadelphia a considerable sum of money, the interest of which should be devoted to rewarding ingenious men and women who make useful inventions. The premium is not to exceed twenty dollars, and the medal is to be of copper, and inscribed "*To the most deserving.*"

The control of the Scott Legacy Premium and Medal (by Act of 1869) was transferred to the Board of Directors of City Trusts, and referred by the Board to its Committee on Minor Trusts, and that committee resolved, that it would receive favorably the name of any person whom the Franklin Institute may from time to time report to the Committee on Minor Trusts, as worthy to receive the Scott Legacy Premium and Medal. The Franklin Institute, by resolution in 1882, accepted the above-named action of the Committee on Minor Trusts, and referred the duty of making such recommendations to the Committee on Science and the Arts. The Committee determined that the recommendation for such reward shall be made on the favorable report of a sub-committee which shall be appointed to examine the invention or discovery.

Upon request, from interested parties, made to the Secretary of the Franklin Institute, full information will be sent respecting the manner of making application for the investigation of inventions and discoveries; furthermore, the Committee on Science and the Arts will receive and give respectful consideration to reports upon discoveries and inventions, which may be sent to it with the view of receiving one or the other of the awards herein named, and full directions as to the manner and form in which such communications should properly be made will be sent on application. Inquiry may be addressed to Wm. H. Wahl, Esq., Secretary.

Easy Method of Producing Large Anatomical Diagrams.

Mr. W. T. Thomas, in a letter to the *Lancet*, August 11, 1888, says that he has found thin sheets of mica coated with a varnish of one ounce of dried Canada balsam to two ounces of benzole to answer admirably. His mode of procedure is described as follows: Having coated the mica with varnish, lay it on the picture or engraving to be enlarged, trace the outlines on the varnished surface with a fine drawing pen and liquid Indian ink. Place this as the slide in an ordinary magic lantern (oil lamp gives ample luminosity—I use an Argand reading light in the lantern) and the picture is enlarged to any size according to the distance of the lantern from the screen. I find it is better to use the wall as the screen where the paper or calico is hung, and it is an easy process to run over the outline on the material with a soft crayon. The tracing, fitting up, and drawing occupy on an average a quarter of an hour. Enlarging on the blackboard so that the lecturer may fill in is easily done by this method, the room being slightly darkened, absolute darkness not being necessary as only black lines are required, and no fine features or tracery.

Chloride of Ethylene and the Cornea.

Nature, Sept. 13, reports that at the meeting of the French Academy of Sciences, Sept. 3, M. Raphael Dubois submitted a paper descriptive of experiments on the physiological action of the chloride of ethylene on the cornea or covering of the eyeball. The author showed that the chloride of ethylene introduced in any way into the system produces in the dog, several hours after waking, an opacity of the cornea of a very remarkable character. In his experiments he studied the nature of this phenomenon, and the mechanism by which it is produced.

"The Triumphs of M. Pasteur."

Under this heading the *Intransigeant*, of September 10, gives a list of six persons who have died recently of hydrophobia, after having submitted to the "infallible" inoculations of the method of Pasteur. The journal had previously, September 6, announced the death of a boy, named Villemain, of Marseilles, who died June 23, after inoculation. The six new cases are as follows:

1. Bertin (of Gentilly).—Bitten May 15 by a mad dog; inoculated on May 17, and for 24 days after. Died of hydrophobia, June 20, 36 days after the bite.

2. Labeaume (laborer, of Châtenay).—Bitten May 29 by a mad cat. Treated at the Institut Pasteur, from May 30 to the 14th and 29th of June. Died, rabid, July 6, at Versailles Hospital, 36 days after the bite.

3. Ducos (of St. Jean de Bonnefond).—Bitten June 16 by a mad cat. Inoculated from June 20 to July 7 (18 days). Died of hydrophobia at the Hôtel Dieu, at St. Etienne (Department of the Loire), 32 days after being bitten (July 18).

4. L. Mesnil (of Châtenay), aged 44.—Bitten March 25 by a mad cat. Treated at the Institut Pasteur from March 26 to April 12. Died, rabid, July 30.

5. Mdme. Sarasin (of Saint Meurice, Switzerland), aged 44 years.—Bitten July 1 by a mad dog. Treated at the Pasteur Institute Died, rabid, at the Broussais Hospital, August 4, 35 days after the bite.

6. Guers, Joseph (of Chelles).—Bitten July 13 by a mad dog. Inoculated from July 16 to August 6 (20 days). Died, rabid, at the Necker Hospital, under the charge of Professor Peter, 26 days after the bite (August 8).

Remark should be made that, with the exception of the case of Mesnil, all these inoculated persons died in less than 40 days after being bitten; that is to say, that instead of *retarding* the progress of the virus, the inoculations by Pasteur accelerated it. The average period of the incubation of the malady, without treatment, is from 40 to 50 days. And after these hecatombs have mournfully proved the impotence and the danger of his anti-rabid inoculations, M. Pasteur begins now to speak of preventive inoculations for cholera. It is a case of senile dementia which will lead up to a real social peril under the sanction of Government.

7. In addition to the above cases, the *Medical Press*, of July 7 last, reported that "a man, aged 28, who was bitten by a rabid dog in the month of December last, had just died. He was treated by Pasteur immediately after the accident."

8. The *Lancet*, September 15, has an account of the cases announced by *L'Intransigeant*, with the addition of the following: "A child, at Marseilles, aged 31 months, who was bitten on May 9 last by a rabid dog, and treated at the Pasteur Institute from May 14 to June 9, died from rabies on June 23—fourteen days after the end of the treatment." From a statement published in the *Annales de L'Institut Pasteur*, we find that these details referred to the case of Villemain, mentioned in the first few lines of this record.—*Zoöphilist*, Oct. 1, 1888.

Explosive Mixture.

The *American Journal of Pharmacy*, September, 1888, says: A serious accident happened in Topeka, Kansas, on the morning of August 14, when Dr. Detlor, a veterinary surgeon, attempted to powder in an iron mortar a quantity of saltpetre and sulphur. On striking the mixture with an iron pestle a violent explosion took place, shattering the mortar and resulting, besides serious damage to property, in the wounding of the operator, whose left hand was completely blown off, the right hand pierced and mutilated, and a leg and other parts of the body lacerated. Several other persons were more or less seriously injured and a horse on the opposite side of the street was wounded.

Crowley's Brain.

The brain of the dead chimpanzee, Crowley, has been examined by Dr. Spitzka. He finds that it weighs a third less than the average human brain, but is more like a human brain than that of any other chimpanzee whose head has been opened. Dr. Spitzka found faint white streaks at the floor of the fourth ventricle, which, when fully developed in man, are supposed to be connected with the highest functions of hearing, such as the power to distinguish the different words of a language. The auditory streaks are not found in deaf mutes, but have been found poorly developed in the brains of imbeciles and well developed in the brains of intelligent persons. Their presence, though very faintly developed in the brain of Crowley, is regarded as an interesting discovery. Dr. Spitzka, however, thinks that the power to develop in Crowley was very limited.

A Cunning Malingerer.

The Paris correspondent of the *Therapeutic Gazette*, August, 1888, says: "An amusing case of malingering was the other day related by an army doctor. A soldier was suspected of feigning a cystitis, from which he claimed to be suffering severely. He had thus secured exemption from many irksome duties; but the surgeon mistrusted the man, partly because army doctors are naturally incredulous, partly because the appetite remained excellent, and chiefly because the patient always found some pretext for passing the bloody urine when no one was present. Once, however, he was compelled to officiate while the surgeon was watching him. The blood was there, sure enough, only with the last drops passing a most unnatural hissing noise was noticed, as if some gas were escaping from the bladder. Suspecting a trick more than ever, the doctor, at the next micturition, ordered a hospital nurse to draw with a catheter the water from the bladder direct, when lo! and behold! a beautiful specimen of normal healthy urine was obtained. Caught at last, the soldier confessed he had first dropped into his urine blood squeezed from his gums, and, when something more convincing became necessary, he had blown it himself into his bladder by means of a common grass stem. Hence that wonderful escape of gas observed before the final collapse of the deception."

Dissimilarity of the Knee-Jerks in Ataxia.

At the meeting of the Congress of Polish Physicians and Naturalists at Lemberg, July 18–22, 1888, Dr. Goldflam, of Warschau, spoke of the dissimilarity of the knee-jerks in the two limbs in locomotor ataxia. After careful study he is led to the conclusion that this symptom is a very early one and of great value in diagnosis. He observed it at the time when paræsthesias or neuralgic pains first appeared, and when the knee-jerk was present on both sides, but was different. In all these cases the knee-jerk subsequently disappeared. Cases of locomotor ataxia in which the knee-jerk is retained are very rare. Goldflam refers to one case in which it was diminished; one in which it was diminished only on one side; five cases in which it was exaggerated—probably cases of combined degeneration; and seven cases in which it was retained, but was unequal on the two sides.—*Wiener med. Presse*, September 9, 1888.

American Medical Association.

The fortieth annual meeting of the American Medical Association will be held at Newport, R. I., June 25, 1889, having been postponed from the date first decided upon (June 4) in order to hold its sessions at the time of the celebration of the 250th anniversary of the settlement of Newport. The later date was also found to be more convenient for the local societies. The Committee of Arrangements consists of: Drs. H. R. Storer, Chairman; C. F. Barker, M. E. Baldwin, C. A. Brackett, J. P. Curley, P. F. Curley, J. P. Donovan, H. Ecroyd, Jr., V. M. Francis, T. A. Kenefick, G. M. Odell, F. H. Rankin, W. C. Rives, Jr., S. H. Sears, W. S. Sherman, H. E. Turner. W. Thornton Parker, Local Secretary.

The Associate Committee appointed by the Rhode Island Medical Society, consists of Drs. G. D. Hersey, W. H. Palmer, G. T. Swarts, all of Providence, R. I.

American Academy of Medicine.

The American Academy of Medicine will hold its next annual meeting at the New York Hospital, Tuesday and Wednesday, November 13 and 14, 1888. Papers will be read by Drs. H. I. Bowditch, of Boston; Theophilus Parvin, of Philadelphia; Leartus Connor, of Detroit; L. D. Bulkley, of New York; J. C. Wilson, of Philadelphia; E. Andrews, of Chicago; George J. Fisher, of Sing Sing, N. Y.; C. C. Bombaugh, of Baltimore; R. L. Sibbet, of Carlisle, Pa.; W. F. Waugh, of Philadelphia; and the President's Address, by Dr. F. H. Gerrish, of Portland, Maine.

Dr. Richard J. Dunglison, of Philadelphia, is Secretary.

Ohio State Sanitary Association.

The sixth annual meeting of the Ohio State Sanitary Association will be held at Canton, Ohio, November 14 and 15, 1888. An interesting programme has been provided. Dr. G. C. Ashman is President, and Dr. R. Harvey Reed Secretary, of the Association.

American Public Health Association.

The American Public Health Association will hold its sixteenth annual meeting in Milwaukee, Wis., Nov. 20, 21, 22, 23, 1888. An interesting programme has been published. Dr. Irving A. Watson, Concord, N. H., is Secretary.

NEWS.

—Captain John Jellard has died of yellow fever in St. John's Hospital, Brooklyn. There is no occasion to fear a spread of the disease.

—Dr. Löhlein has been offered the chair of Gynecology at the University of Giessen, which was made vacant by Prof. Hofmeier's resignation.

—H. M. Whelpley, Professor of Microscopy in the St. Louis College of Pharmacy, has written an instructive paper on microscopy of drugs mentioned in the U. S. Pharmacopœia.

—A committee appointed by the Los Angeles County Medical Society reported back to that society that there were in that city on Sept. 7, 1888, 256 practitioners, only 140 of whom were recorded in the Clerk's office; in other words, nearly one-half of them were practising in violation of the law.

HUMOR.

Physician (to convalescent patient)—"My bill, sir, for attendance during your late illness." Patient (looking over bill and turning white)—"Great Scott! Doctor. Was I as sick as all that?"

Where the Poems Went.—"Is the editor-in-chief in?" asked a stranger, as he sauntered into the city reporters' room at 8 o'clock in the morning. "No, sir," replied the janitor, kindly, "he does not come down so early. Is there anything I can do for you?" "Perhaps so. Are you connected with the poetical department of the paper?" "I am, sir." "Oh, what do you do?" "I empty the waste baskets, sir."—*Milwaukee Sentinel.*

Aging as a Fine Art.—"There, you look ten years older now," said a down-town barber yesterday as he released a man from the meshes of a towel and yelled "Brush!" To the customer who followed he said: "That was a young fellow who has just started in business here as a doctor. He looked too young, and, to get patients, he had to grow old in the barber's chair. Can we age a man? Well, I should say so. It's a part of our trade. Let me take you in hand and dress your hair and beard my way for a month and you'll look a middle-aged man. It's all in the appearance. People won't trust a young doctor if he looks too young, and I am adding years to the appearance of half a dozen young physicians now."—*Chicago Herald.*

MARRIAGES.

Myers—Snyder.—On October 11, 1888, by Rev. F. Berkemeyer, A. F. Myers, M.D., of Blooming Glen, to Miss Wilhelmina Snyder, of Sellersville, Bucks Co., Pa.

Grim—Fetter.—On October 18, 1888, by Rev. D. Sevin Coleman, George M. Grim, M.D., of Ottsville, to Miss Sarah E. Fetter, of Churchville, Bucks Co., Pa.

Groom—Hutchinson.—On October 23, 1888, by Rev. Dr. J. M. Knox, President of Lafayette College, Albert Groom, M D., to Miss Margaret Hutchinson, both of Bristol, Bucks Co., Pa.

OBITUARY.

LEWIN H. COHEN, M.D.

Dr. Lewin H. Cohen was born in Scotland in 1842, and died at Aiken, S. C., September 27, 1888. After an excellent preliminary education, Dr. Cohen was graduated from the New Orleans School of Medicine, February 15, 1862. He served for a time in the military hospitals of the Confederacy, and later engaged in practice in the city of New Orleans, and held the chair of Adjunct Professor of Chemistry in his *Alma Mater*. In 1868 he returned to Quincy, where his family resided. During the last twenty years he has been engaged in practice in Quincy, except for a period of a few months during which he occupied the chair of chemistry in the Louisville Medical College.

At the time of his death, and for several years before it, he was Professor of Chemistry in the Quincy College of Medicine. At different times he was connected with the Board of Health of Quincy, where he became noted for his efficient service. He devoted much time and study to sanitary science, and was a member of the American Public Health Association, and other sanitary societies.

He served as Secretary of the Adams County Medical Society for several years with great acceptance, and contributed liberally to its discussions.

In his intercourse with his medical brethren he was scrupulously observant of the amenities and ethics of the profession. Of scholarly tastes, he had an appreciative knowledge of general literature, as he had also of the higher forms of art, and maintained under all circumstances the character of a cultivated gentleman.

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Clinical Lecture.

THE TREATMENT OF INTESTINAL INDIGESTION.[1]

BY SOLOMON SOLIS-COHEN, M.D.,
PROFESSOR OF CLINICAL MEDICINE AND APPLIED THERAPEUTICS.

Gentlemen: Among the cases we have had before us this week, a number in which the same diagnosis was made, are deserving of some detailed attention, not because of their rarity, but of their great frequency. Although the diagnosis was the same, the treatment of different patients varied in several particulars. The lack of success that often attends the management of these cases may, I think, be attributed to the routine treatment into which one is only too liable to fall, and which, because of its apparent benefit in very many instances, is applied to all without discrimination. But there is another reason for failure; especially in patients who, like the young woman we have had here to-day, wander from physician to physician, and from dispensary to dispensary, varying the circle with devotion to different infallible remedies placed upon the market by disinterested benefactors of a suffering public. The element of failure which I refer to is disregard of your directions by the patient. When such a case comes into your hands in private practice, refuse to take charge of it unless your advice is obeyed religiously; otherwise you will simply be added to the number of doctors "who did no good."

A few words as to the facts upon which we based our diagnosis, in order that from these we may derive hints as to our therapy. Our patients have all complained of pain, of pain associated with the taking of food, though the association has varied and in one case was only developed by persistent questioning. In general, the location of the pain was below the diaphragm, but in the instance of the young woman already referred to, not only was the association of the pain with food-taking hard to develop, but its location was in the præcordium—in fact the patient came to us with a home-made diagnosis of heart-disease, in which doubtless she had been encouraged by some of the quacks and patent-medicine venders she had visited. Now this location of pain in the cardiac area, associated as it often is with breathlessness, with palpitation of the heart, and with not infrequent sensations of faintness, may mislead not alone the patient but also a careless medical adviser. Make it a rule never to accuse the heart until you have excused the stomach. This patient has not even a condition that may with justice be termed functional disturbance of the heart, for the fluttering is purely a secondary matter, and will disappear with the cause of it; namely, irritation of the pneumogastric nerve-endings by decomposition products in the stomach and duodenum; and we need not think of cardiants among the remedial agents to be applied. I have called her case, like our others, intestinal indigestion, because the principal failure of function seems to be in the upper bowel; but the existence of this præcordial pain, and the facts that it is relieved by taking food (the obscure association which we had to seek for); that it comes on at a time when the stomach is empty, or ought to be, some

[1] Delivered at the Philadelphia Polyclinic and College for Graduates in Medicine.

three hours after a light breakfast; and that it is sometimes relieved by the expulsion of a sour liquid, water-brash—show that the gastric mucous membrane is also at fault. The pain is not a cardiac pain in any degree; it is gastric: and it results either from the prolonged pouring out of hyperacid gastric secretions, or more probably from the presence of some of the fermentation acids resulting from the decomposition of retained food, acting upon the unprotected mucous membrane of the stomach. Hence the relief on the taking of food, whether from mere mechanical absorption of the acid fluid, or of from chemical and digestive reactions. Hence also the relief which in many of these cases results from the administration of alkaline waters, or even of simple hot water, which dilutes the stomach-contents and flushes out the viscus. If we have reason to consider this acidity due to actual abnormal secretion of an altered gastric juice, we can appropriately resort to the expedient of repressing that secretion by a minute dose of one of the mineral acids, upon the well-known principle, that acid applied to the orifices of acid-secreting glands, checks their activity; but if we have reason to believe as in the case before us, that we are dealing with acid products of fermentation, we must depend upon alkalies for palliation, and upon the prevention of fermentation for cure. But we have been told also, by other patients, of pains below the diaphragm; sometimes referred to the region of the stomach; sometimes to various portions of the abdomen, sometimes diffuse, as indicated by the whole hand being used to indicate the locality, or by to and fro motion of the hand, laterally or longitudinally; sometimes localized, as when one or two fingers are used to point its site. Now ordinarily, if but one or two fingers, especially finger-tips, are used to indicate the site of pain, we are justified in suspecting a purely local cause, and in the presence of other gastric or intestinal symptoms we must not forget the possibility of ulceration. Indeed in every case of pain we should always interrogate the locality; though very often the lesion is more or less distant from the seat of pain, even where local inflammatory or ulcerative processes in internal viscera are its cause. Many cases are even on record of pain persistently ascribed by the patient to one organ, due to morbid conditions in another, not thought of. Nor can we be sure in the case of disease of the thoracic or abdominal viscera, that the site of pain indicated by the patient, externally, has any immediate topical relation with the seat of lesion. However, in these cases of ours now under consideration, neither local examination nor any of the symptoms has given us reason to suspect any structural lesion. The seat of pain in the greatest number of instances has been the right hypochondrium or hypogastrium, and its extent has been indicated by three or four fingers. It is rarely constant, and usually begins an hour or two after eating, or reaches its height of exacerbation at that time. Its duration varies from twenty minutes or so, to hours. An associated pain in the left hypochondrium will be found to have less obvious connection with the taking of food, and to be due in most instances to a distended colon, disappearing with the relief of that condition. The flatulence and abdominal distension, present in greater or less degree in all our cases, point to the formation of gases of decomposition in the intestine; while the belching and sour eructations in one of them point to the same condition in the stomach as well. We have irregularity in the alvine movements, constipation alternating with diarrhœa, but the former condition predominating. The discharges contain considerable mucus, and are in the majority of instances light, or even clay-colored from deficiency of bile. There is more or less irregularity in the hepatic function; and although enlargement of the liver could be detected in but one of our cases, in several instances there has been slight tenderness upon pressure over the site of the liver. A jaundiced complexion has been noted in but one of our patients, though slight discoloration of the conjunctiva has been found in several. In accordance with my invariable routine I have examined the urine in all of these cases, but have not found anything significant. We have been able to elicit in several cases, and we are justified in assuming it to be true in the others, that nitrogenous foods, meats particularly, cause much less discomfort than starchy and fatty aliment. In the case of the seamstress living on bread and tea, the pallor and general weakness indicated that we will have to deal with an altered condition of the blood, a veritable anæmia, as well as with the local intestinal trouble; but before we can expect any good results from our corroborant treatment in this case, we must put the digestive canal into condition to perform its functions.

Observe the expression, gentlemen, the digestive canal. We are too much inclined in cases of disordered digestion, whether

chronic or acute, whether due to local disease or occurring in the course of fever or other systemic disturbance, to concentrate our attention upon the stomach. But the stomach is by no means the sole organ of digestion; or even the principal one. I am not at all satisfied that we thoroughly understand the physiology of digestion as yet, nor that it is the comparatively simple process described in some text-books. Still we do know the general outlines of the process with sufficient exactitude to base upon that knowledge a rational therapeusis.

Assuming as correct the division of foods into nitrogenous (proteids), and non-nitrogenous, the latter consisting of the two groups, carbo-hydrates or starches and sugars, and hydro-carbons, or fats and oils; we know that while the gastric juice exerts its action almost, if not quite, exclusively upon nitrogenous foods, the salivary pancreatic and intestinal secretions are capable of acting upon all foods. Thus, if gastric digestion were even to come to a stand-still, nutrition could still be maintained; while the total abolition of all but gastric digestion would result sooner or later in wasting, from deprivation of the non-nitrogenous elements of the food.

It was suggested by so great an authority as Claude Bernard that the function of the gastric juice was to prepare the nitrogenous aliments for further and complete digestion by the pancreatic juice, and so careful and experienced an observer as Sir Wm. Roberts is strongly inclined to the same view. Be this as it may, we must not overlook the existence of the pancreas and neglect its functions in the consideration of the conditions actually calling for remedy in our cases of so-called dyspepsia. In fact, I am more and more led to the view that we should assume all cases of dyspepsia to be intestinal indigestion, unless we have clear evidence to the contrary; and I am certainly getting much better results in treatment, than when I thought of the stomach first. However, in the cases we have had here, all the evidence has gone to show that the intestine is at fault, and we can therefore base our treatment upon that fact. We have to correct some condition of the mucous membrane of the duodenum and the upper intestine which prevents the proper action of the digestive fluids in that portion of the alimentary canal; and we have also very probably to deal with a resultant condition of impaired function of the pancreas, and in a less degree of the liver.

The first indication is to cleanse the mucous membrane from the mucus and other catarrhal products which, mingling with the undigested food, invite the fermentative change in the presence of the organisms always abundant in every place communicating with the atmosphere. We can do this to a great extent by copious draughts of water, preferably hot water, as more likely to produce a good local effect upon the chronically inflamed mucous membrane, by its action upon the vessels. This should be administered from half an hour to an hour before meals. Should it prove inefficient we shall resort to lavage, or washing of the stomach, which however is for obvious reasons less efficient here than in cases of presumably uncomplicated gastric catarrh. Secondly, we must for a little while restrict the amount of food passing for digestion into the intestine, and in particular those kinds of food, namely the starches, sugars, and fats, which so largely depend upon the intestinal processes for their disposition. In this way we cut off the supply of fermentative material. Thirdly, we must gently stimulate the pancreas to the production of an increased and altered secretion. Fourthly, we must try to substitute artificially the deficient pancreatic juice until it shall be poured out in sufficient quantity. And finally, and to the patient's mind of more immediate importance, we must try by palliative measures to relieve the pain and other distressing symptoms, while we are endeavoring to remove permanently their cause. The diet then must be largely nitrogenous—underdone meat, milk, fish, eggs, poultry, soups and broths. If necessary, aliment may be partially predigested, but this expedient has not been indicated in the cases under review. Bread is cut down to the smallest quantity consistent with comfort; potatoes and similar vegetables are interdicted entirely, while the leguminous and succulent vegetables are permitted, in order to secure a sufficiently varied diet. Rice, too, of the starchy foods may be allowed, if it is well cooked so as to soften the grains thoroughly. Sweets, pastries, fats, with the exception of moderate amounts of butter, are prohibited, and as a matter of course, frying is forbidden as a method of cooking. It is a mistake, however, to restrict the diet too much, or to maintain even the moderate restrictions suggested, for too long a time. We must endeavor to put our patient as soon as possible into such condition that he may eat any legitimate food placed before him. The administration of Hoffmann's anodyne

immediately before meals, I have found to be very often efficient in the relief of pain, while it acts as a partial solvent for the small amount of fats permitted, and plays the part of the gentle stimulant of pancreatic secretion desired. One teaspoonful in water is the average dose. Twice that quantity may be given if necessary. Despite the theoretical objection that it cannot escape destruction in the stomach, clinical results have satisfied me that the suggestion of Sir Wm. Roberts to give an artificial preparation of the pancreas guarded by an alkali, an hour or two after the taking of food, does mechanically assist intestinal digestion. And this fulfills our fourth indication. The liquor pancreaticus prepared for Roberts is probably the best preparation, but it is difficult to obtain it at all times and places, and I have been well satisfied with the tablets prepared by Messrs. Fairchild in this country. One, two, or three of these tablets may be given, about an hour after meals, or later if circumstances demand it.

This is the general plan of treatment we have adopted in the cases we have seen together. We have, however, varied it somewhat in individual instances. In the case where præcordial pain, coming on at about eleven o'clock daily, led to a suspicion of "heart-disease," and in which we concluded that acid fermentation took place in the stomach, we gave before meals a sedative and anti-fermentative mixture of creasote, one minim, bismuth salicylate and bismuth subnitrate each seven-and a-half grains, suspended in glycerine and peppermint water. The peppermint water was selected as having an antiseptic action, as well as furnishing an agreeable flavor. This is a slight modification of a prescription suggested by Bartholow. In the anæmic case, we gave Fowler's solution, and we added nux-vomica to the prescription in a case of excessive tympany dependent upon intestinal atony. In the case associated with jaundice we gave sodium phosphate as a cholagogue and laxative, and in several cases we gave either the official compound rhubarb pill, or our Polyclinic pill of ignatia, belladonna and podophyllin, to correct the discharges, at such intervals as were indicated by the individual conditions. We have advised our patients to take gentle open-air exercise about three hours or four hours after the principal meal of the day, but we cannot expect this advice to be carried out. Nor are we likely with these dispensary patients to secure obedience to our dietetic regulations. From these last alone in milder cases, with perhaps the compound spirits of ether for the pain, you will often be able to secure astonishingly quick relief in private practice. I am reminded at present of the case of a man who came into my office this morning to report that he had remained free from pain all summer. This patient according to his own statement had for two years vainly sought relief from a pain in the right hypochondrium, which he had been informed was due to a chronic inflammation of the intestines. I diagnosticated simply intestinal indigestion, and secured almost instant cessation of pain by the use of hot water potations and Hoffmann's anodyne in conjunction with a strict diet of skimmed milk, persisted in for two weeks; after which gradual restoration to full diet was permitted and medication intermitted at intervals, to be completely abandoned at the end of a month.

In acute returns of the chronic complaint which has yielded to treatment, a brisk saline cathartic should be administered at the outset, and the diet restricted to skimmed milk for two or three days; at the end of which time the patient will probably profess himself well. One word more as to the general management of your cases. Insist that the habit of drinking iced water at meals shall be abandoned. If any fluid must be taken with meals—and it is well to begin dinners with soup for the purpose of furnishing suitable liquid among other reasons—let it be warm. And if hot water be disagreeable, and soup be not taken or be insufficient, suggest hot lemonade. In conclusion, you will note that nothing has been said concerning pepsin, or hydrochloric acid—because in these cases they are useless.

—The City Council of Jacksonville, Fla., has passed an ordinance imposing a fine of $500 or less, or imprisonment not exceeding 30 days, upon any person who enters the city without a permit from Dr. J. Y. Porter, unless such person can prove that he has actually resided within the city limits continually since the first day of last September.

—For the week ending October 27, 1888, there were 388 cases of contagious diseases in New York City, and 54 deaths. This large number was made up as follows: Typhoid fever, 43 cases and 11 deaths; scarlet fever, 122 cases and 16 deaths; diphtheria, 105 cases and 23 deaths; measles, 117 cases and 3 deaths; cerebro-spinal meningitis, one case and one death.

COMMUNICATIONS.

MANAGEMENT OF THE NEW-BORN CHILD.

BY E. K. WELLER, M.D.,
POTTSTOWN, PENNA.

I have been incited by Dr. Ady's[1] article and the criticism of it by Dr. Bates,[2] to offer a few suggestions which may be interesting to them and should receive the attention of all obstetricians.

Improvement over ancient and traditional customs has been made in nearly everything else except in the custom of dressing babies. Let us stop for a moment to examine the customary toilet of the baby. I dress the cord in this manner: I tie it about three inches from the umbilicus and cut it another inch beyond the ligature. I then wrap it in a soft linen (preferably old linen) rag, or, better still, absorbent cotton powdered with oxide of zinc. Over this is placed a diamond-shaped pad, to the acute angles of which are attached two cords or ribbons, one at each, which are tied at the back or carried around to the front or side. We are usually taught to put on a bandage covering the whole abdomen to prevent the child from being "big-bellied" or ruptured.

Nature has made the abdominal wall elastic for a purpose—that it may accommodate itself to the varying conditions of the child's digestion. A baby is usually subject to flatulence, and if not bandaged rarely suffers any inconvenience from it because the elasticity of the walls allows the flatus to move freely through the intestines. If an adult is troubled with flatulence after meals, what a great relief it is to have a few vest buttons opened. How then is a baby expected to be comfortable with a nicely fitting band about its abdomen, thus interfering with nature's intentions and provisions? A little reflection will also serve to show that the band favors rather than guards against rupture. Suppose that a band is applied snugly and remains in proper place—which it never does, owing to the constant wriggling motion so common to the young of all animals—then the abdominal walls are prevented from expanding, and any straining as from crying, or the force of any concussion as from sneezing or coughing, being evenly distributed over the abdominal wall, will be resisted by the band, and its effects concentrated upon the weaker parts, viz., the inguinal and the femoral regions. The band protects the stronger portions and not only leaves the weaker unprotected, but endangers them by throwing upon them the whole force of any concussion.

Then comes a diaper so large that it has to be folded two or three times before it can be pinned, straddling the baby's limbs and leaving a mass of heavy and useless weight over its groins, interfering with the free use of its limbs. Next comes a little shirt made of linen or muslin, and often starched stiff with saw-teeth or some form of crochet work around the neck and arms. Surely this can have no argument in favor of its being retained as a part of a child's dress. It is cold, irritating and uncomfortable. Another uncomfortable garment, fortunately not so universally used, is the pinning blanket. Then comes the skirt with a band which is pinned around the chest under the arms, thus confining the chest and interfering with its free and proper expansion, both from its situation and its weight, it being the heavier piece of the garment. Over this is put the dress, usually made of some light material, leaving the neck, shoulders and arms with but a single, thin and cold covering. Sometimes these parts are protected by a shoulder shawl, but this is always everywhere but in the right place. Here we have a mass of humanity in its most active state pinned with fifteen pins into a bundle of heavy and unphysiological dress; and then we expect it to be healthy, comfortable and sweet-tempered! It is absurd to expect a child to rest sweetly in such a garment, and it often requires the utmost skill of the physician and teas and anodynes to quiet such a child, whereas a loosening of the band, or a pin taken out of the skin, would make it quiet.

In the dress I invariably recommend, I discard the band altogether, using instead a pad until the navel is healed. I never allow a linen shirt to be worn. The diaper should be 18 x 18 inches, made of canton flannel folded in the usual manner, and a piece 10 x 10 laid over it unfolded. This latter piece receives all the discharges and saves a great deal of work. The first garment is made up of an underskirt and night-gown, which should reach about ten inches below the feet (twenty-five inches long), and be of some soft, fleecy goods like canton flannel, which also has the advantage of not shrinking when it is washed. It should be cut princess, with sleeves to the wrists, all seams smooth, the edges around the neck and

[1] REPORTER, July 28, p. 109.

[2] REPORTER, Sept. 1, p. 285.

wrists hemmed on the outside, and at the bottom it may be fixed according to fancy; a tie and one button behind. This makes a complete fleece-lined garment, comfortable, unirritating and healthy, giving entire freedom to all abdominal and thoracic movements as well as to that continual wriggling and working of the limbs by which infants exercise and assist their development.

The next garment is made of woolen baby flannel, cut according to the same pattern, but one-half inch larger and a few inches longer—to cover the first garment—with generous arm-holes, pinked or scalloped, but not bound, with one or two buttons behind at the neck, and embroidered or plain at pleasure.

The dress is preferably cut princess to match the other garments, although any dress can be used; but I would advise them to be made much shorter than is customary, thirty or thirty-six inches being sufficient.

These three garments can be put together —sleeve within sleeve—and put over the baby's head as one garment; they button behind and the child is dressed, there being no pins except the diaper-pin.

This makes at once the easiest, simplest and healthiest way to dress an infant. It is surprising how infinitely more quiet and sweet-tempered babies are when thus warmly, loosely and comfortably clad, and how much strength and annoyance are saved the mother and nurse.

THE PREVENTION OF CONCEPTION.

BY L. HUBER, M.D.,
ROCKY FORD, COLORADO.

After the Editorial that appeared under this caption in the issue of the REPORTER for September 15, and the more recent appearance of Dr. Blackwood's sensible and excellent article on the same subject, it must needs be that some interest is felt in a further discussion of the question. As to its moral aspect I fully coincide with the views of the articles specified.

The matter is just this. There is a continuous demand made upon the physician to prevent conception and to interfere with pregnancy. This is an experience common to the practitioner everywhere, no matter what ranks or classes of society he serves. This being a fact, and furthermore there being a prevailing practice among the laity to prevent conception, sometimes with good reason, but more often, it must be regretfully acknowledged, criminally, let us ask what the profession has done by open and concerted effort to establish the legitimate grounds on which such interference could be justifiably ventured; and how many of its members have to-day clearly defined ideas on the subject? The profession has not done anything bodily to establish and propagate well-defined and intelligent notions in the case, and the physician is often left to bear weighty responsibilities alone and unsupported, or positively to refuse interference, when a broader conception of the subject would clearly define his duty to be directly the opposite course.

With this introduction I am ready to show how one great source of evil has poured out its bane for years upon the people. I refer to the fact of a low class of literature that presumes to instruct the laity in right ideas on sexual hygiene, health and comfort. Every physician knows that such books exist by the hundred and are eagerly sought, read and believed. The authors of these works are often misanthropic, shallow and unscientific writers. There are exceptions, it is true, but they are not many; so that all in all the character of the literature along this line is not much changed. Now, why should there not be a preponderance of good and reliable books instead of the grade that exists on so general and so important a subject? Why have not the best men of the profession given their labors and thought to proper sexual hygiene and thus elevated man above the mere exactions of animal desire? It seems to me that a legitimate way of preventing conception to some extent is for the profession to dispense right ideas in regard to the sexual relation and the sexual health of mankind. A large class in the community is willing to subordinate its animal instincts and desires to the restraints of intelligence and reason, and there are many persons to whom correct information on the subject would be of the greatest advantage.

We study the anatomy and physiology of the digestive organs and deem it not improper to institute experiments to make us familiar with their functions and capacity. We know that some regulation of their use is essential to their health and the health of the body in general. In the same way, I think, the sexual organs and functions should be studied. As it has been, the physician has been brought in contact almost solely with their pathology, and not with their

physiology. How many writers upon these subjects have presumed to tell us whether it is excessive expenditure of the seminal fluid or the excessive indulgence in the sexual orgasm which deteriorates and deranges the functions of the organism? Is not this an important distinction? The seminal fluid may be a very cheap secretion, on the one hand, while the nervous excitation incident to copulation may be a source of immense disturbance and wear.

The writer recollects what a professor had to say on this subject, in one of his lectures to the students of a large medical college. After diligent study of what literature there was on the subject and careful observation, the professor had concluded that the second element, as above distinguished, led to most of the evils of excessive sexual indulgence. I think it is no misrepresentation of Prof. Parvin, of Philadelphia, the lecturer referred to, to allege that this was the view he took at the time, and that it was his opinion that, for an average healthy man or woman, intercourse more than once in ten days was incompatible with the best exercise of the bodily and mental functions. This then should be the basis of a correct sexual hygiene. This fact being known to the profession, and taught by them to the multitudes with whom its members daily come in contact, would do great good, and tend to correct the evils, not only of excessive sexual indulgence, but also of frequent conceptions and pregnancies.

The profession has been negligent also in teaching the laity what is the proper time after a woman's puerperium to engage again in the rights of the marriage bed.

So much for what could be done by right knowledge and ideas along a few particular lines. We must take the case as it is, however. The demand upon the practitioner to prevent conception is an unquestionable fact. Under these circumstances, it is the duty of the profession to define more clearly what conditions justify and what do not justify interference, and then to settle upon some safe, efficient measures to meet the demand. As this work is pushed forward, criminal interference, so general and flagrant nowadays, should decline or cease altogether. The aim should be the preservation of the health and life of the race, on grounds of justification so plain and reasonable that the blood of unborn, or of untimely born, millions should not cry out against the slaughter that goes on in the very centres of civilization. There is need that this important subject should not be shunned, as it has been, by medical men, but that it should be taken up bravely and prudently, and settled in some way. If medical men leave it entirely to those who discuss it from unworthy motives, they cannot be held wholly guiltless of the consequences.

RESPIRATION EXERCISES FOR WEAK HEART AND FOR ITS DEVELOPMENT.

BY A. H. P. LEUF, M.D.,

DIRECTOR OF PHYSICAL EDUCATION AT THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA.

In my paper in the REPORTER, July 21, 1888, I considered the development of the capacity and of the muscles of the chest as being factors in shortness of breath. In the present note it is my object to call attention to the most common cause of "short-windedness," a weak heart. Puffing, blowing, and otherwise apparently inadequate breathing, are almost universally believed by the laity to be due to defective chest work; but this is a great error. We all know that the main object of respiration is the interchange of oxygen and carbonic oxide; and we also know that the signs of the inadequate interchange of these gases are those of suffocation. We know further, that these signs may be due to defective air supply to the lungs, or to defective blood supply to the lungs. The former condition was sufficiently considered in my last paper, but the latter involves heart weakness.

Careful observance of long distance runners will show that the respirations are not much increased in number during exercise, but that they are somewhat deeper than usual. On the other hand, neither are the pulse-beats much increased in number during long and continuous hard work; but they are increased in strength and volume. George Littlewood, the great six day "go-as-you-please" runner, has hardly any increase in the number of his pulse beats so long as he is in good condition. I have often examined him while he was in training for a one week's race; after having ran thirty miles in three hours his pulse beat 75 times a minute, while at the start it was beating at the rate of 70 times a minute. Long distance runners have very wide lower chests, the cartilages flaring out so that the transverse diameter of the chest is largest at its inferior edge. This expansion I do not believe to be altogether due to increased

respiratory effort, but it is undoubtedly largely due to the muscular action in running. It is a fact, though perhaps not generally known, that good running and walking involve the constant exercise of the abdominal muscles, and hence the soreness in the lumbar and iliac regions after a long brisk walk or run.

A weak heart causes shortness of breath by failing to pump through the lungs enough blood to become supplied with the oxygen required by a hard-worked organism, although the oxygen may be furnished in abundance to the lungs by respiration.

I have now briefly, and in outline, explained how "short-windedness" may be due to a weak heart, and have shown that, in long continuous work, depth of respiration and strength of heart best meet the increased demand for oxygen. Now let us inquire as to the means of detecting a weak heart.

As a rule the chest is wide and its capacity good; the pulse is weak and rather fast, being rapidly increased on relatively slight exertion; violent exertion, as for instance a hundred yards dash at full speed, causes facial lividity of a most marked type; the face has a light ashen color, the lips a light slate blue, and sometimes even the ears have a similar appearance. There are at present two men at the University of Pennsylvania who have just such an appearance after a race or training exercise; one runs a hundred yards and the other four hundred and forty yards (a quarter mile). I desire to say emphatically that all persons who show defective heart power in the way I have indicated, and as these two young men evidently have, are at any time liable to develop some form of cardiac disease. It is well known that professional athletes do not live long. They usually die of phthisis or heart disease. Why this is so, I shall try to explain in my next paper on this subject.

What is a good test of heart weakness? Any of the following answers admirably—climbing a rope, stairs, ladder, or hill; hauling and running and rowing, the latter being perhaps the severest test of all.

Persons exercising violently with weak hearts are liable to disease of the valves, to aneurism of the heart and arch of the aorta, and of the muscle substance itself. I believe that most cardiac disease arising from athletic exercises consists primarily of myocarditis, which eventually leads to secondary disease, the character of which depends upon the developmental defects of the organ, and the after life of its owner.

How to overcome heart weakness is an interesting question. Medicines may do it to a certain extent, but the strength gained is not the most serviceable that could be attained. Witness the effect of digitalis. It slows the heart's action and increases the force of its beat; but if the patient is in bed, let him sit while you notice the quickness of his pulse; or if he is up and about, let him run, and mark how quickly he becomes winded. So long as he is not really in need of a strong heart his pulse beat is good and apparently satisfactory; but when the hoped-for result is to be attained, it fails. This is not so in the case of a heart strengthened by exercise.

A teacher of mine had a hobby about the importance of daily alvine evacuations, and he would say that the rectum is a muscle to a large extent and can be trained to more effective work just like other muscles. The same is true of the heart. A great hollow muscular force-pump — why should it not be strengthened by exercise? How best to do this is the query. In answer to this question I would lay down the following generalization. Let the patient practice at those exercises which most easily cause dyspnœa. If he is "winded" running up a flight of stairs, keep him at it until he can do it without being so affected; but begin by less than the whole flight. Let him go as far as he can with comparative comfort, then rest him and let him try again and again. If this is done daily, at last the desired end will be accomplished. When this is done it will be found that his other difficulties may also be overcome without either "heartburn," palpitations, or rapid breathing. Be sure, however, always to examine the heart before recommending such a course, as you may kill your patient while trying to benefit him if he happens to have a diseased heart. The best way of all to train a weak heart is to have its owner engage in some out-door sports, as for instance rowing, running, walking, and sharp practice at base-ball, foot-ball, lawn-tennis, cricket, and hand-ball. Under such circumstances there is much mental exhilaration, nervous stimulation, and increased bodily tonicity *without any reaction.*

The mistake is usually made of overexerting the heart by too severe and prolonged exercise. The proper way to do it is in easy stages. The work should be steady, graded day after day, and never continued until there is a feeling of tiredness. It should always be stopped while an inclination is still felt to do additional work.

Society Reports.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Meeting of October 22, 1888.

Dr. L. Bolton Bangs in the Chair.

Dr. Alexander S. Hunter was elected President for the ensuing year; Dr. L. B. Bangs, Vice-President; Dr. John S. Warren, Treasurer; and Dr. Charles Avery, Secretary. The *Comitia Minora* was given power to publish annually a medical directory of the city of New York.

Dr. Paul F. Mundé read a paper on the value of the

Operation of Shortening the Round Ligaments of the Uterus,

based on the results of 23 cases. The views which he expressed about 1884, in the *New England Medical Monthly*, and in the *New Yorker med. Presse*, are somewhat different from those which he holds to-day, principally regarding the difficulty of finding the round ligaments. In the present paper he discussed three questions which have not yet been settled regarding Alexander's operation: First, can the round ligaments always be easily found, drawn out, and the uterus thus lifted and everted? Second, in what class of cases is the operation justifiable and likely to be followed by complete relief? Third, are elevation and suspension of the uterus by shortening the round ligaments alone permanent, or is an additional operation on the vaginal and pelvic floor necessary to secure permanent relief?

Objections to the operation, he said, have been principally theoretical, or come from those whose experience has not enabled them readily to find the round ligaments. The difficulty which Dr. Mundé had formerly experienced in finding the ligaments he attributes to having followed too closely the directions of the inventor of the method. He now proceeds as follows: Standing at the side of the patient opposite the point at which the ligament lies, he feels for the pubic spine with the index finger of the left hand, and distinctly marks its situation. Then, being careful not to draw the skin to one side, he makes an oblique incision quite down to the periosteum on the spine. In the incision thus made there pouts up a little mass of tissue which should not be lost sight of during the further steps of the operation, since it contains the terminal filaments of the ligament; when this is picked up by the forceps it makes traction upon the ligament at its attachment to the pillars of the ring. Before making very strong traction upon the ligament during the replacement of the uterus, it is well, he says, to divide the nerve. The ligament varies in size from that of a knitting-needle to that of a quill, and there may be that much difference between the ligaments on the two sides. Adhesions, or too small size, of the ligaments known to exist beforehand constitute contra-indications to an operation. He said he had broken the cord three times in making traction. The entire time occupied in the operation need not be more than half an hour. Formerly he thought it was more difficult to find the ligaments in fat subjects, but he no longer holds this opinion.

In suitable cases, those in which there is prolapsus of the uterus to a certain degree, retroversion or retroflexion, non-adhesion, and relaxation of the vagina and perineum, Alexander's operation does more toward retaining the uterus in the replaced position than any other operation. There are, however, other exceptional indications for the operation. It should never be done when there are uterine adhesions, and he says it is expecting too much of it, without the aid of a plastic operation, to hold up the prolapsed uterus and vagina. Of his twenty-three cases, nineteen have proved successful, and the patients have been under observation from three months to three and a half years; the uterus has retained the position it was put in when the operation was performed. In only seven of the twenty-three cases was Alexander's operation alone performed; in others it was supplemented by plastic operations on the vagina and perineum. Dr. Mundé expressed himself as decidedly in favor of Alexander's operation in properly selected cases, and said the risk was very slight, and it caused very little pain or discomfort to the patient. None of his patients have been subjected to the test of pregnancy subsequent to the operation, as has happened to some under the care of Alexander and Dr. Polk. He does not think he would give up the operation for the one preferred generally by German surgeons—laparotomy and fixing the uterus to the abdominal walls.

Dr. Hanks thought the operation suitable for some cases, but that it had been done too often in this country, had resulted in at least five deaths, and had been performed by those who would have had less difficulty in finding the ligaments had they practised more on the cadaver.

Dr. Boldt said he would limit the operation to cases of retroversion or retroflexion in which the uterus had lost all power of regaining vitality at the point of flexion; while in other cases he would employ the new method of pelvic gymnastics, which had proved so successful in the hands of some German surgeons.

Dr. Currier thought that with most men, since they lacked the expertness in finding the ligaments which came from experience, it would be better to perform Alexander's operation at one sitting, and plastic operations on the vagina and perineum at another, if they were indicated, rather than attempt to do both at the same time.

Dr. Mundé, in reply to Dr. Abbott, said he was unable to tell by the constitution or flesh of the patient whether to expect large or small ligaments.

Reports of Clinics.

COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.[1]

MEDICAL CLINIC—PROF. DELAFIELD.

Cirrhosis of Liver.

Case I.—The patient was a man, 51 years old, a porter. He dates his illness from an attack of rheumatism in the knees, about three and a half years ago. He has always been a drinking man, and for some time has been troubled with vomiting. This symptom has been aggravated during the past three years. He has been unable to eat meat and other articles of diet without distress and vomiting, and has been living upon crackers and milk for some time. He has had no appetite, has lost fifty pounds in weight, and has grown weak and unable to work. He has been of quite yellow color, but this has nearly faded away at present. His bowels have been regular; he has had no dropsy, no headache, no vertigo, no cough, and has not vomited blood. Examination of his urine showed a sp. gr. of 1021, and no albumin.

On removing the patient's clothes, his body and face are seen to be emaciated. When he lies upon his back, a distinct fulness is noted in the upper part of his abdomen. Such fulness is natural enough lower down, but observed in the epigastrium should direct attention to the organs in that region. It happens, in this case, that there is marked muscular development, which in part accounts for the fulness, but there is also undoubted enlargement of the liver. It can be felt during respiration, and is readily mapped out by percussion. Its position is normal at its upper border and extends two and a half to three inches below the free border of the ribs at its inferior edge. The liver is not increased in size laterally. It does not completely fill the area marked by dulness. It would be called a large, but not a very large liver. It feels smooth and there are apparently no adhesions. The spleen is not enlarged; the lungs are normal. The pulse is full and strong, and the radial artery can be felt to be slightly tortuous.

Here then is a man who has had a serious illness for a long time, who is emaciated and unable to work, and the only physical sign is enlargement of the liver. What is the matter with the man? He has cirrhosis of the liver, of the form that is sometimes called hypertrophic. Microscopically, the appearance presented is identical with that of the form which produces a decrease in the size of the liver.

This patient presents a good example of those cases in which the disease occurs without dropsy. Cirrhosis of the liver is liable to be associated with some form or other of dropsy, but the latter symptom is not always present. This man is quite far advanced in his disease, his health is much impaired, and yet there has been no dropsy. His loss of health is due to the fact that the inflammatory changes in the liver are such as to interfere with its functions, and malnutrition is the result.

The disease in this patient, as is often the case in cirrhosis, is complicated. The patient is suffering with chronic alcoholism and alcoholic gastritis. He has been coming to the Clinic for the past six weeks. The treatment has consisted of a regulated diet, total abstinence from alcohol, and the administration of acids and bitter tonics. He notes some improvement, but it is slight.

In these cases diet is of the most importance. There is no general rule to be laid down. Each patient has his own peculiarities. Some do best on milk alone, others on milk and the starches, others on vegetables, and others again on meat. These foods alone or combined should be given the patient, and three hours after digestion the stomach emptied by the stomach pump. It should be carefully observed just what foods are digested and what are not digested. The determination of this is not very troublesome, and it affords the only means of estab-

[1] Vanderbilt Clinic.

lishing a dietary that will certainly agree with the patient, and on which his health may be expected to improve, notwithstanding his possible distaste for some articles in his diet table. A patient's own sensation in regard to the degree of digestibility of certain foods is no guide at all in these cases. Having established a positive dietary, the next step is to give the patient exercise. As with this patient active exercise is out of the question at present, massage should be practised at first; and later, as his condition improves, walking, horse-back riding, etc., are to be advised.

With regard to drugs, most of these cases do well on some vegetable tonic before meals—the infusion of quassia, or of gentian, for example, either alone or with an alkali or an acid. As a rule, the alkali agrees best, but it is impossible to foretell with certainty which to use.

Phthisis.

Case II.—The patient is a woman, 23 years old, single, in previous good health; two months ago she was taken sick with fever, pain in the right side, and cough. On the first day she spat up blood, and also on the second day, but in less quantity; since then her expectoration has been whitish and without blood. She remained in bed for a day or two, her fever subsided somewhat and appeared chiefly in the evening; it was followed by sweating. She suffered from vomiting, which was due to the severity of her cough. Her feet and legs became somewhat swollen She lost strength, and twenty pounds in weight. Three of her family have died of consumption. To-day her temperature is 100°.2; the urine shows neither albumin nor casts, and her sputa, examined once, contained no bacilli. On physical examination of the lungs, there is found anteriorly good resonance and no rales. On the right side the breathing is somewhat rough, and the resonance above the clavicle is slightly high-pitched. Posteriorly, the left side is normal. On the right side, from the spine of the scapula down, there is dulness, amounting to flatness at the lowest part. Natural breathing is heard down to about the middle of the lung, and below this point it is bronchial in character. There is bronchophony from the spine of the scapula down, growing more and more marked toward the base of the lung.

A patient with this history and with these physical signs behind, and with no evidence of pulmonary disease in front of the chest, may be suffering from one of three diseases, namely, phthisis, broncho-pneumonia, or pleurisy with effusion. In the latter disease almost any physical signs may be found, and unless an aspirating needle is first introduced into the chest it will be impossible to make a positive diagnosis. This, then, would be the first thing to do. Moreover, the sputa should be examined daily for several days, to determine further the presence or absence of tubercle bacilli. But even if bacilli are not found, there is no certain evidence that tuberculosis does not exist. The longer it is searched for and not found, however, the less likely is the patient to be suffering from phthisis.

As for broncho-pneumonia, in the form presented here, it would be very rare in a person of the patient's age. The diagnosis of phthisis would, therefore, be the most plausible. If it is phthisis, the case is not so bad as it looks. This disease, to have made such advance in two months, would ordinarily prompt a bad prognosis. Not so, however, in those sub-acute cases beginning in the lower lobe of one lung, when the consolidation is confined to that lobe, as is the case with the present patient. It is quite possible to have a thorough recovery and for this reason: the tubercular part of the inflammation is small compared with the amount of the other inflammation—that associated with the infiltration of fibrin and pus. It is chiefly to this infiltration and not to tubercle that the consolidation is due.

Prof. Delafield says he has followed such patients for years, and has seen them recover from their phthisis and eventually die of some other disease; at the autopsy he has found that most of the lung had returned to its natural condition, and that only in small areas was there any result of the former lesion, and this was the site of the deposit of tubercle. This pathological condition, he says, also offers an explanation of the fact that bacilli are not found in the sputa.

With reference to the treatment, he said that a person in the condition of life of this patient, should be urged strongly to enter the hospital, and at first should be put to bed. The next consideration would be to feed her: milk, cream, beef teas—fluid diet—should be ordered, care being taken that it is retained by the stomach. Mild and persistent counter-irritation should be applied to the right side of the chest. This is all.

It is supposed, of course, that the diagnosis of phthisis has been confirmed, in speaking of the above treatment.

Foreign Correspondence.

LETTER FROM BERLIN.

(FROM OUR SPECIAL CORRESPONDENT.)

The Berlin Medical Society.—Leontiasis ossea.—Poisoning with Antifebrine.—Detection of Antifebrine in the Urine.—Prophylactic Use of Quinine in Malarial Diseases.—Most Satisfactory Medium of Antisepsis.—Peroxide of Hydrogen as an Antiseptic.

BERLIN, Oct. 19, 1888.

The Berlin Medical Society has again begun its weekly meetings, which enjoy a well-merited repute all over the professional world for the highly interesting and strictly scientific character of their discussions. Many of the members of the Society are well known in America, partly through their professional labors, and partly through their visit to the International Congress, in Washington. Besides Virchow, its President, the Society counts among its members men like Bardeleben, Ehrlich, Esmarch, Eulenburg, Fränkel, Gerhardt, Gusserow, Hahn, Henoch, Lewin, Leyden, Liebreich, and Waldeyer—a truly splendid array of medical celebrities.

Prof. Fränkel presented, at the first meeting of the Society, Oct. 10, a young girl with the rare affection of *Leontiasis ossea* The salient feature of this ailment is a peculiar and enormous hypertrophy of all the bones of the skull and the face. The girl, who was 12 years old, had up to 4 years of age always enjoyed good health; at that time she fell on the right side of her forehead, exactly on the frontal protuberance. Gradually, evidently as a result of this injury, two enormous prominences developed on her forehead, followed by a general hyperostosis of the head and face, giving the patient a very peculiar appearance. As the father had been specifically infected, it was thought that the syphilitic element had something to do with this affection. Virchow, however, rejected this supposition, and named the affection Leontiasis ossea, on account of its similarity to leontiasis in elephantiasis.

Those fond of prescribing the newest medicines will be pained to learn that Dr. Rohler has declared antifebrine to be not only not a harmless drug, as has been asserted, but, on the contrary, even capable of producing very serious poisoning. This information is the more worthy of note as antifebrine is quite a popular drug in headaches, especially in those of a neuralgic character. The victim was a young man, 19 years old, who had sent to a drug-store to obtain "something for a headache." The pharmacist sent him a white powder, with instructions to take one-half of it at once and the other half after a few hours, if no relief was obtained. The result was a frightful cyanosis, extending even over the point of the nose and the finger-nails, and a pulse of 152. The dangerous symptoms lasted for three days, when recovery began. It was learned that the patient had taken ninety grains of antifebrine, divided into two equal doses, in the course of four hours. The usual dose of antifebrine being about four grains, the man had taken two doses in quick succession, exceeding the usual amount nearly twenty-three times. This large dose has been exceeded only once, namely, by Dr. Simpson, of New York, who, for the sake of an experiment, took one hundred grains in seven single doses within two hours and a half. The cause of the cyanosis has been interpreted as either arterial spasm or as venous dilatation.

It will probably interest the readers of the REPORTER to learn a ready method of determining the *Presence of Antifebrine in the Urine*. Antifebrine possessing a great power of resistance against chemical reagents, its determination consists in the recovery of aniline—a decomposition product of antifebrine—by means of the indophenol reaction. The urine is mixed with one-quarter of its volume of concentrated sulphuric acid, and boiled for some time. After cooling, one drop of liquid carbolic acid and a few drops of a solution of chloride of lime are added. In presence of antifebrine a red coloration appears which, by addition of ammonia, turns to a beautiful blue.

The possibility of preventing malarial diseases by the administration of quinine, is at present, in view of the colonial enterprises of the German Government, a question receiving considerable attention. The early observations of Dr. Schweinfurt, the noted African explorer, and of Prof. Hertz, of Amsterdam, on the prophylactic value of quinine in malarial diseases, have received a strong confirmation by the experience of Dr. Graeser, of Bonn, which has just been published. The author made five trips to Tandjong-Priok, the harbor of Batavia, Java, which is regarded as the most malarial point in the world, the entire place having been built by laborious dredging on the worst swamp imaginable. Ships stopping at that port frequently lose one-half of their crews;

of an English vessel, stopping there some time ago, the captain alone escaped the malarial infection. The results which Graeser obtained by large doses of quinine, mixed with the daily ration of gin, were such that the prophylactic power of quinine in malarial diseases can no longer be doubted. With the exception of some few cases, in which quinine proved utterly useless, the fever was effectually prevented by fifteen-grain doses of quinine, given every other day. Those moving into a malarial district will no doubt profit by this valuable observation of Graeser's.

In speaking of the papers read at the Cologne meeting of the German Medical Congress, the paper by Dr. Rotter, of Munich, on the *Most satisfactory Medium of Antisepsis*, was not referred to. Dr. Rotter emphasized the unequalled antiseptic virtues of corrosive sublimate and carbolic acid, but regretted that, even in the usually employed solutions, each often gave rise to serious constitutional troubles. An ideal antiseptic agent, in Rotter's view, would be one which, besides insuring prompt and complete antisepsis, could never produce poisoning. This problem Rotter appears to have successfully solved, not by a new drug, but by a combination of many antiseptic agents, each of which, in the quantity present, is absolutely harmless, while their union secures a perfect antisepsis. Rotter's solution contains, in a quart of water:

Corrosive sublimate	gr. ¾
(representing a solution of 1 to 20,000)	
Chloride of sodium	gr. iii ¾
Carbolic acid	gr. xxx
Chloride of zinc,	
Sulphocarbolate of zinc	āā gr. lxxx
Boric acid	gr. xlv
Salicylic acid	gr. ix
Thymol,	
Citric acid	āā gr. iss.

It will be seen from this formula that, with the exception of salicylic acid, all the drugs are represented only by one-tenth of their usually employed quantities. Citric acid serves to render the solution of chloride of zinc clear, while thymol serves to give the mixture a certain slight definite odor, in order to prevent its being drunk as water. The advantages of this antiseptic medium are said to be: (1) complete antisepsis; (2) absolute harmlessness; (3) ease and cheapness in obtaining it; (4) stability of solution and absence of color and unpleasant odor. Besides, the mixture can be prepared from the drugs by the mere aid of hydrant-water. Thus far the mixture has been tried in 27 surgical and 26 gynecological cases at the Munich Hospitals, and has given the most satisfactory results. In this connection it is proper to mention the assertion recently made by Dr. Tromp, that peroxide of hydrogen is an ideal antiseptic. In order to sterilize water, it is sufficient, according to his statement, to add one part of peroxide of hydrogen to 10,000 parts of water. To sterilize fifteen minims of water, it required: for 19,600 germs, the contact of one part of peroxide of hydrogen in fifty thousand parts of water for one day; for 34,000 germs, the contact of one part of peroxide of hydrogen to ten thousand parts of water for one day; for cholera bacilli, the contact of one part of peroxide of hydrogen in ten thousand parts of water for five hours; and for typhoid bacilli, the contact of one part of peroxide of hydrogen in five thousand parts of water for one day.

Peroxide of hydrogen is without odor or taste, and in the strength employed is quite harmless. The drug is cheap enough also, as one quart of a pure three per cent. solution costs only thirty cents. To sterilize ten quarts of a liquid, about one fluid ounce of this solution would be required. The advantages of Rotter's mixture, especially when made into pastilles, over Tromp's fluid, are very decided, as will readily be seen.

PERISCOPE.

Hot Baths in Chronic Synovitis.

Dr. G. Allexich, of Crema, states that he has used hot baths with good results in six cases of chronic synovitis of the knee, in some of which the affection was of many months' standing, and had resisted all ordinary treatment. Dr. Allexich makes his patients keep the knee immersed in hot water for half an hour at a time. The joint is placed in the water in a flexed condition, and the patient stands upright, resting the weight of his body on the sound limb and supporting himself with his hands on the backs of two chairs. When taken out of the bath, the knee is carefully dried and wrapped in cotton wool, the joint finally being carefully bandaged. For some days the patient should only go about on crutches. Dr. Allexich thinks that the virtue of various hot springs renowned for the cure of joint affections (such as Acqui, Abano, Viterbo, Ischia, etc.) consists not in their chemical composition, but in their temperature, and that equally good effects can be got at home by the simple means just described.—*British Medical Journal*, September 15, 1888.

Mortality of Pneumonia.

In the *University Medical Magazine*, Nov., 1888, Dr. William Osler discusses the mortality of pneumonia, and disputes the assertion of Dr. Hartshorne that the "mortality of pneumonia to-day is, under similar circumstances, more than twice as great as it was forty years ago." Dr. Osler shows that the statistics upon which Dr. Hartshorne relied to prove his proposition are susceptible of a different interpretation, and says that in our large city hospitals the death-rate in pneumonia always has been, and is likely to continue to be, very high, usually over 25 per cent., often reaching 40 or even 50 per cent Any slight increase in the death-rate which may have occurred at certain hospitals, he thinks may be reasonably attributed to the enormous increase in the pauper population of the large cities of this country during the past twenty years, which, of course, would cause a very great relative increase in the number of persons who live in conditions rendering them more susceptible to, and less able to withstand, such an affection as pneumonia.

With reference to the cause of death, he says:

"A good many complicated factors combine in an individual to cause death, but, studying the fatal cases of pneumonia as so many lessons from which to learn wisdom for the future, we may, I think, divide them into three groups: 1, those in which the death has resulted from such complications as gangrene, meningitis, ulcerative endocarditis—conditions at present beyond our art to remedy; 2, cases in which death has resulted from mechanical causes, over-distension and paralysis of the right heart; 3, the large group in which death has been due to failure of the general powers under the influence of the high fever, or of the specific poison, or of both combined."

With reference to treatment he says:

"We are likely to be deceived in our therapeutical conclusions unless we bear in mind the unquestionable fact that a very large proportion of all cases of simple acute pneumonia in healthy adults recover without the use of drugs. Careful nursing, feeding, local applications, keeping the bowels open and the skin active, meet the indications. Even in cases of great severity, with extensive involvement of the lung, we see the crisis occur normally under most adverse circumstances. Such a case occurred last session at the Philadelphia Hospital. The patient, admitted on the seventh day of the disease, had been up and about at his lodging and drinking heavily, and had had neither medical nor domestic care. Although delirious on admission, the crisis occurred on the morning of the eighth day and he entered upon a convalescence as satisfactory in every respect as if he had had the most approved antiphlogistic treatment.

"I have often puzzled over the cadavers of persons dead of pneumonia and asked why should this man have died? Too often the answer is the echo of the question. The cause is evident in many cases in the form of serious complications, such as endocarditis and meningitis. Some years ago I was struck in the post-mortem room, with the cases of young vigorous men, who had died with distended right hearts and systemic veins and extensive, though in some instances limited, areas of consolidation. It seemed as if the heart had failed in over-distension—asystole—and I determined, when the opportunity arose, not to let such cases die without a copious venesection. Clinically, I think, we see this condition in two different periods of the affection. There is an early cardiac embarrassment during the first few days of the disease, leading to slight cyanosis; and in a later period, at the 7th to the 10th day, we see with increasing anxiety the changing color, a dull suffusion, a deepening hue, then the marked cyanosis. Bleeding may be indicated at both these periods. In hospital practice we more commonly see the patients in the latter. For ten years past I have practised free bleeding to the amount of from 20 to 25 ounces in adults, and yet I have to confess to disappointment in my results. I have seen but one case recover after bleeding, out of twelve or fifteen. The cases of bleeding in the late stages have been uniformly fatal. I know it has often been performed with the patient *in extremis*, but it seems imperative to attempt to relieve an over-distended circulatory system. I know it does relieve in the cyanosis of cardiac dilatation from other causes, but in pneumonia there are doubtless conditions other than mechanical. In these cases the administration of oxygen or compressed air is often most serviceable. Complications carry off many, and direct cardiac failure not a few, but both together do not number the cases which we see gradually fail under the continued influence of the fever, the disturbed cardiac-respiratory mechanism and the poison. Here we are often baffled, but in this group we see repeatedly the beneficial effects of the timely use of cardiac and respiratory stimulants."

Experimental Excision of the Pancreas.

At a meeting of the Reale Accademia di Medicina of Turin, July 20, Dr. G. Martinotti described certain experiments he had made as to the effects of excision of the pancreas in dogs and cats. He had first removed the horizontal portion of the organ, and later on the vertical part, taking care to perform both operations at equal intervals of time after the animals had been fed and when the digestive function was in a state of inactivity. On comparing the two portions he found no evidence of compensatory hyperplasia in the one removed last. On removing the whole organ at once, however, except a tiny piece attached to the duodenum and in normal relation to the excretory duct, the stump examined after a certain time had elapsed presented different characteristics according to the extent to which it had been affected directly by the operation. The portion in immediate contact with the duodenum was unchanged, whilst the other extremity, which bore the amputation scar, showed signs of regeneration of the gland structure. There was no sign of increased activity in the liver or in Brunner's glands, which Landois is inclined to look upon as functionally analogous to the pancreas; on the other hand, the intestinal glands had evidently had an increased amount of work thrown upon them. At another meeting Dr. Martinotti exhibited the viscera of dogs from which he had removed the whole of the pancreas; the animals had been killed and dissected in the presence of several medical men the day before. In none was there a trace of peritonitis or of extravasated blood. In a dog on which the operation had been performed on June 23, the intestinal coils were healthy, and quite free from adhesions. A piece of pancreas, of the size of a small chestnut, was attached to the duodenum, with which it communicated by a special duct. In an animal operated on on June 25, and in another operated on on July 14, almost precisely similar conditions were found, the portion of pancreas in the former being of the size of a filbert, and in the latter of a lentil. The gastro-duodenal mucous membrane and the abdominal viscera were normal. On the other hand, in a puppy operated on July 15, which at first appeared to rally from the operation, but which afterward began to waste rapidly, no trace of pancreas was found; the duodenum was bent upon itself, and was adherent to the wound in the mesentery. Through the loop thus formed a knuckle of small gut was strangulated, and the lower part of the intestinal canal was entirely empty. Dr. Martinotti pointed out that the small portion of pancreas left in these cases was utterly insufficient to discharge the functions of the organ; he regarded them as proofs of attempted regeneration, as he was certain he had removed every particle of the gland, with the exception of a few acini, which were intimately connected with the walls of the duodenum, the bile-duct, and the blood-vessels. These acini had formed the starting-point of the regenerative action. He concludes that the pancreas can be removed (from dogs) without any ill effect, if the operation is done with proper precautions, especially as regards antiseptics. The greatest danger connected with the operation is the formation of adhesions, which may lead to strangulation of intestine.—*British Medical Journal*, September 15, 1888.

Transition of Benign Growths of the Larynx into Malignant.

It has been suggested that benign growths of the larynx are liable to become transformed into malignant tumors as a result of intra-laryngeal operations for their removal. This suggestion, if proved to be well founded, would do much to show that Van Bruns's introduction of intra-laryngeal operation for tumors was not the great improvement it has been held to be; but, on the contrary, a very mischievous procedure. The plan of collective investigation has been employed to throw light upon this subject by Dr. Semon, the editor of the *Internationales Centralblatt für Laryngologie*, &c., and in the July number of that journal the results of the inquiry are briefly given. These are so important that the profession should at once be made fully acquainted with them. Returns have been furnished by 107 observers, who have together recorded 10,747 cases of benign growths in the larynx and 1550 cases of malignant tumors. Of these 10,747 cases of benign growths, 8216 have been submitted to intra-laryngeal operation, and among this number there are 3382 cases of papilloma. An apparent transformation from benign into malignant growths has been noticed in thirty-two instances. Each one of these cases must be submitted to a very careful criticism, but, apart from that, as many as sixteen of the number are marked by those who record them as "doubtful," and they cannot therefore be used. It is quite open to question whether the remaining sixteen cases do not

include examples of "mixed" growths, and it is noteworthy that the tables include twelve cases not submitted to intra-laryngeal operation, in which a similar change in the nature of the growth was thought to be noticed. But putting aside this view altogether, we are met with this supposed change in one case out of every 513 cases thus treated. It must be at once admitted that if the operation had any appreciable influence in modifying the nature of a neoplasm, the proportion of cases in which it would be observed would be much greater than this. Considering the enormous advantages the intra-laryngeal method of operating possesses, it is a matter of considerable satisfaction that it is thus conclusively shown not to be attended with the grave danger that has been suggested in some quarters.—*Lancet*, July 7, 1888.

Codeine in Diabetes Insipidus.

Mr. Melville Jay, of Adelaide, South Australia (*The Australasian Med. Gazette*, vol. vii, No. 7, p. 166), believes that the following history will plainly prove that in some cases of polyuria codeine has a well-marked effect. A married woman, 37 years old, with no children, enjoyed good health up to twenty-six years of age. At that time she noticed a great increase in the amount of urine passed; either immediately preceding this event, or simultaneously with it, she suddenly ceased menstruating, and she has never had any return of her menses since that time. She was told that she was suffering from diabetes mellitus; the average daily amount of urine was thirty-two pints. She remained in this condition for two years, when no trace of sugar could be found in the urine. The daily excretion, however, has never fallen below fifteen pints, the average being from twenty to twenty-four pints without any return of sugar. Mr. Jay, on commencing attendance on the case, found twenty pints passed *per diem;* specific gravity 1003; no trace either of sugar or albumin; no casts; great tenderness of the posterior wall of the vagina and well-marked vaginismus, preventing intercourse for the past four years; uterus small, but healthy. She was inclined at times to be hysterical. He commenced by giving her a pill three times a day containing a quarter of a grain of codeine and half a grain of extract of nux vomica. On the second day the quantity of urine fell to nine and a half pints, on the third day to six pints, on the fourth day to four and a half pints. For two months after this she continued the same treatment, gradually increasing the amount of codeine to one grain three times a day; the daily amount of urine passed varied from four to six pints. She then ceased taking the medicine for a few days, whereupon the quantity rose to eight pints; but it was again reduced to five pints on returning to the codeine. The dose of the drug was purposely not increased to any great extent.—*Practitioner*, August, 1888.

Tubercular Peritonitis.

The *Archiv für klinische Chirurgie* publishes a paper by Dr. Kümmel, of Hamburg, on peritoneal tuberculosis. He says that many physicians even now believe that tubercular peritonitis is always a symptom of general tuberculosis. There are, however, many cases to prove that this form of tuberculosis is as purely a local affection as tubercular disease of the bones and joints, and that it is curable by surgical means. The earliest case on record was that operated on by Sir Spencer Wells in 1862, when he performed laparotomy with the view of removing an ovarian cyst. Finding that he had tubercle of the peritoneum to deal with, he drained it, and the patient was still in perfect health in 1887. Kümmel has collected forty cases of operation for tuberculous ascites. Two of the patients (both operated on by Naumann) died of pyæmia; thirty-eight recovered from the operation; only three of these died afterward of phthisis. Thirty-five remained healthy up to the date of the report; they had increased in weight, and their health was excellent; even the symptoms of pulmonary phthisis disappeared in some cases. Thirty-nine patients were of the female sex. In each case an erroneous diagnosis was the cause of the operation. The disease was always supposed to be a tumor of the ovary, or some other abdominal tumor with liquid contents. Only once the ascites was found in the course of an operation for ileus. The symptoms of the disease are those of circumscribed ascites, but the affection may also simulate tumors of various kinds, for, by adhesions of the intestines, there are formed pockets and cavities, receptacles of pus, serum, etc. The favorable results of the operation justify laparotomy for peritoneal tuberculosis in every case in which it is possible to recognize the affection. Even the existence of pulmonary phthisis does not contra-indicate the operation.—*British Med. Journal*, July 7, 1888.

Double Aneurism of the Ascending Aorta.

At the meeting of the Baltimore Academy of Medicine, Feb. 21, 1888, Dr. Thomas F. Murdoch reported the following case of double aneurism of the ascending aorta, and said that on February 13, at 8 P. M., he was summoned to see Mr. B., and found him complaining of nausea, great pain in the epigastric region (which was very sensitive to pressure), eructating great quantities of wind, and his heart beating so tumultuously that it was impossible to determine if there was any disease of the valves. The patient said that he had had dinner at 3 o'clock, consisting of a beefsteak and a potato, and shortly afterward was seized with nausea, pain in the stomach, and tumultuous action of his heart, which obliged him to go home, but he did not send for Dr. Murdoch until the hour above named. Dr. Murdoch prescribed an antispasmodic mixture and after giving two doses, he left the patient somewhat relieved and ordered a dose of castor oil to be taken in the morning. He was disposed to give him an emetic, but the patient said that he was never able to vomit. Dr. Murdoch was again called at 1 A. M. the next day, and found the patient still suffering; he ordered an enema, and at his own suggestion gave him half a tumbler of Hunyadi water. The enema brought away some hardened feces, and, at the same time, the patient vomited some fluid, but nothing that he had eaten. He expressed himself as feeling much better than he had done since he was first taken sick. Dr. Murdoch remained with him until 4 A. M., and left him comfortable, although his heart was acting tumultuously.

Dr. Salzer met Dr. Murdoch in consultation at 9 A. M. Dr. Salzer had attended Mr. B. last summer at Bedford Springs. He agreed with Dr. Murdoch that the action of the patient's heart was sympathetic and said that he had frequently examined both the heart and also the urine, and he was certain there was no disease of either heart or kidneys. Dr. Salzer treated the patient for gastric trouble. After much consideration they determined to give him 20 grains of ipecac in compressed pills, which instead of vomiting him, had the most soothing effect, and he got some sleep, the first he had had. After fifteen minutes, the ipecac was repeated, and he slept for nearly two hours, waking occasionally. Dr. Salzer left at 11.30, considering him much better. Dr. Murdoch remained until 12.30, thinking then that he could leave him for an hour or so, but he had not been away more than thirty minutes when the patient expired suddenly.

At the autopsy made by Dr. Councilman, both lungs were found to be œdematous. In the left pleural cavity was about one ounce of clear serum. The entire heart was enlarged, both ventricles, especially the left, somewhat dilated. The wall of the left ventricle slightly thickened. The muscular tissue of heart flabby. All the valves of the heart were normal. The aorta atheromatous in its entire extent. In the aorta just above the aortic valves were two aneurisms, one opening into the sinus of Valsalva behind the right anterior valve and one behind the posterior valve. The one to the right was of the size of a black walnut, its opening into the aorta about three-fourths of an inch in diameter. The aneurism opening behind the posterior valve was not larger than a small hazel-nut.

In the wall of the right auricle there was an area about one inch in diameter where the wall was thin, anæmic and in the middle of this a ragged opening the size of a No. 14 catheter which passed directly into the larger aneurism. Both aneurisms contained red coagula.

Case of Suicide, with Numerous Wounds.

In the *Prager med. Wochenschrift*, March, 1888, Prof. Von Moscha communicates the case of a man, 51 years of age, who was admitted into an asylum on account of insanity, and after an interval of two months had apparently so far recovered as to be entrusted with a knife for the purpose of cutting an apple. In the night following he was found covered with numberless wounds, from which blood was abundantly flowing, and died the succeeding evening. Amongst other wounds, more than 200 were found on the left half of the chest, 50 on the inner side of the left forearm, and 28 small wounds on the inner side of the right forearm. The left radial and ulnar arteries were divided. On section, six of the wounds on the left side of the chest were found to have penetrated the thorax through the intercostal muscles; the ribs and sternum were not injured. Blood was found in the left pleural cavity, compressing the lung, which was otherwise uninjured. In the anterior mediastinum and on the fat deposited on the pericardium, blood was effused; the heart and pericardium were uninjured. The wounds were made with a small-bladed knife; death was caused by hemorrhage.—*Medical Chronicle*, September, 1888.

Cardiac Complications in Rheumatic Fever.

In a communication to the *Practitioner*, August, 1888, on the form and frequency of cardiac complications in rheumatic fever, Dr. Samuel West says that during the six years that he was Medical Registrar at St. Bartholomew's Hospital, he collected a number of statistics bearing on the subject of rheumatic fever. He gives the results of these in the present paper.

The cases were taken without selection from the ordinary practice of the hospital, and therefore had been treated in various ways. To most salicylate of sodium in frequent doses had been given until the pain was lost, the doses being then reduced. All were placed on low diet, purges administered when necessary, and absolute rest enforced until the pains had been absent for some days; if an increase in diet was then tolerated without return of pain the patient was allowed to get up. He believes that, speaking generally, the patients were kept in bed longer than is usual in many other places.

Accompanying his paper are tables showing the distribution of the cases at the different ages and in the different attacks. The most important part of the statistics, however, deals with the frequency of cardiac complications and their nature at the different ages, in the two sexes, and in the different attacks.

The total number of cases under observation during the six years was 1,137; and as only 15,552 cases of all kinds were admitted during the same period, it is seen that rheumatic fever must be a very common disease, forming, according to these statistics, 7.31 per cent. of all cases. The only other diseases which approached it in percentage frequency were typhoid fever, pneumonia, and phthisis. Death occurred only fifteen times in the 1,137 cases, giving a rate of 1.32 per cent. Of the fifteen deaths, no less than nine occurred in children under ten years of age, so that the mortality in adults must be much lower, say about 0.5 per cent. The cause of death, he says, was found in all cases. There was only one instance of hyperpyrexia, and that recovered after cold bathing.

Out of the 1,137 cases, 619 were in males, and 518 in females, or nearly in the ratio of six males to five females. As regards age, 61.4 per cent. of the cases occurred between the ages of fifteen and thirty years. The average age of the patients at the time of the first attack was in males 22.43, and in females 22.16 years.

Of the whole number of cases (1,137) 70 86 per cent. developed cardiac complications. In this estimate Dr. West included only those who left the hospital with distinct murmurs. When the figures for the two sexes are examined, it will be seen that although the number of cases of rheumatic fever is larger in males, the percentage of heart disease is smaller—64.16 in males as against 77.56 in females In other words, the risk of cardiac complication is greater in females than in males.

After giving the relative frequency with which the different valves and the pericardium are affected, Dr. West says, in conclusion, that the conviction has been growing in his mind that heart disease is an almost essential part of rheumatic fever.

Scarlatinal Otitis Media.

Voss (*Archiv für Orenheilkunde*, xxvi, S. 231) calls attention to a late form of otitis media occurring in the course of scarlet fever, which depends upon the nephritis accompanying the fever. With the diminution of the secretion of urine and the accompanying fever, also frequently preceding these, there occurs difficulty in hearing, with pain in one or both ears. Then come the physical signs of redness of the mucous membrane of the throat, "hyperemia of the auditory canal, in which the drum-membrane participates but little or not at all, but no exudate." If an increase in the quantity of urine occurs, all these symptoms may disappear. If, on the other hand, it remains very small, then quickly occur exudation, redness and swelling of the drum-membrane, perforation of the latter, and at first a serous followed by a sero-purulent discharge. The secretion, which is very copious at first, becomes less but continues, and is sometimes a direct measure of the degree of albuminuria present. If the secretion is scanty, an examination of the urine shows diminution of the albumin and increase in the amount of urine, and *vice versâ*. Increase in the secretion corresponding to an increase in the quantity of albumin and inversely proportional to the quantity of urine, is more striking to the eye. If the albuminuria disappears quickly, the otitis media lasts ordinarily about one or two weeks. Hearing becomes normal. If the albuminuria is protracted in its duration, the otitis may heal first. Treatment must be directed to the nephritis as well as to the ear-disease. —*Centralblatt f. d. med. Wissenschaften*, September 1, 1888.

Tissue Changes in the Human Fœtus.

A paper by Dr. Dührssen, of Berlin, in the *Archiv für Gynäkol.* (Bd. xxxii, 4, 3), gives the result of some recent investigations into the subject. After giving benzoate of soda and glycocol, as Gusserow had previously done, to women in labor, he was able to confirm his chief's investigations as to the presence of hippuric acid in the urine of the child when born and likewise in the liquor amnii. In six cases, however, he found benzoic acid but no hippuric acid in the placentæ. The statement of Ahlfeld, therefore, that the benzoic acid became converted into hippuric acid before it reached the fœtus, was proved to be incorrect. In three of the cases, hippuric acid was also found in the urine; it must therefore have been formed in the fœtus from benzoic acid and glycocol. Hippuric acid was not so constantly met with in the liquor amnii; but its presence there proved urination on the part of the fœtus into it. As it was not constantly present, however, the author assumes that urination does not take place continuously. He believes that the kidneys are active as early as the second half of pregnancy, that the liquor amnii is a secretion from the kidneys of the fœtus and not a nutrient fluid. From the absence of benzoic acid in the liquor, it follows that there is no transudation into it through the maternal decidua in the latter half of pregnancy. Another point demonstrated by the investigation is that the liquor amnii is not in part a transudation from the vessels of the cord, otherwise the benzoic acid which reaches the fœtal circulation as such would also be met with in it. A proof of the activity of fœtal tissue changes, if such were needed, lies in the fact that the whole of the hippuric acid was excreted from the fœtal kidneys within twenty hours of the administration of the benzoic acid to the mother, and this shows also that labor had no influence in retarding the changes. If the benzoic acid was given twenty hours before the birth of the child, its urine showed no trace of hippuric acid; it had all been emptied into the liquor amnii before the completion of the act of parturition. The benzoic acid appeared in the placenta within three-quarters of an hour of its administration. Reckoning the quantity of albumin passing to the fœtus from the maternal blood by the proportion of the benzoic acid given to the mother that passed through the placenta, it was estimated that it received about 80 grains daily.—*Medical Press and Circular*, September 12, 1888.

Primary Tubercular Tumor of the Larynx.

Dehio (*St. Petersburger med. Wochenschrift*, No. 16, 1888) reports a case of primary tubercular tumor of the larynx occurring in a man 41 years old, who had no recognizable disease of the lung. The tumor arose from the left ventricular band, had a broad base and included nearly the whole length of the band. The tumor reached to the median line of the chink of the glottis, covering in quiet breathing nearly the whole vocal cord; it was of a bright green color and presented a flat-backed, irregular surface, whose separate rounded elevations were from the size of a pin-head to that of a millet seed. There was no ulceration. All the rest of the mucous membrane was swollen and reddened; the right ventricular band a good deal thickened. Dehio thought the possibility of a malignant growth was not excluded, and for this reason the larynx was split and the tumor extirpated by Wahl. The tumor was then found to be made up of thick layers of tubercle nodules closely set. Following the operation, remittent fever, cough and thoracic pain developed; emaciation increased, profuse night-sweats occurred, and the patient died seven weeks later with marked symptoms of tuberculosis of the lungs.

W. Lublinski remarks upon this case that infiltrations of the larynx of this kind, with punctiform infiltration, are not so rare, and in his opinion are not to be reckoned among the tuberculous tumors of the larynx first observed by Schnitzler and Mackenzie. —*Centralblatt f. d. med. Wissenschaften*, September 1, 1888.

Hydrastis Canadensis in Vesical Hæmaturia.

In the Moscow monthly *Novosti Terapii*, May, 1888, p. 192, Dr. F. Stroinovsky draws attention to a powerful contracting action of hydrastis Canadensis on the blood-vessels of the bladder. For the sake of illustration, he adduces a striking case of intense vesical hæmaturia in an infant seven days old, in which the bleeding was completely and permanently arrested by four doses of the following mixture:

℞ Extr. hydrastis Canadensis fluidi . gtt. vi
Emulsionis amygdalæ dulc. . . . ℥i
M. D. S. A teaspoonful every hour.

A warming compress over the vesical region was also used.

Rhus Aromatica in Enuresis Nocturna.

In the Moscow bi-weekly *Meditzinskoïe Obozrenïe*, No. 7, 1888, p. 709, Dr. N. Gündobin, of Professor N. A. Tolsky's pediatric clinic, writes that following the recommendations of Ellis, Max and Unna, he tried fluid extract of *Rhus aromatica* in 18 cases of enuresis nocturna, mostly of an idiopathic or neurotic origin, the patients being boys and girls from four to twelve years of age. The dose varied from six to twenty drops twice daily. In twelve of eighteen cases, most brilliant results were obtained, a permanent cure ensuing after the treatment of from seven to twenty-one days' duration. No relapses occurred in any of the patients, some of whom were seen again by Dr. Gündobin about a year after their recovery. In the remaining six cases the drug proved either wholly inactive, or brought about only a slight decrease in frequency of the patient's involuntary micturition. The unsuccessful cases included two of a post-scarlatinal enuresis nocturna; one of organic disease of the spinal cord (with enuresis diurna and nocturna), etc.; in short, in this category of cases the affection was of a secondary and not of an idiopathic origin. Dr. Gündobin never saw any untoward accessory effects from the drug. Children are said to take it quite readily.

Rare Ectopia of the Heart.

This anomaly was observed by M. Poteïénko (*Vratch*) in a female child several hours after its death. The heart, which was as large as a hen's egg and absolutely without pericardium, was outside the thoracic cage upon the anterior wall of the latter, and a little to the left. The apex of the heart was directed upward, the base downward. The thorax was closed in all directions with the exception of an opening about the size of a ten-cent piece, through which the great vessels passed. This opening, which was so completely filled by the large vessels that it was impossible to introduce the finest probe, was near the anterior insertion of the diaphragm, under the inferior border of the cartilage common to the seventh, eighth, ninth and tenth ribs, a little toward the left of the median line. The parents of the child unfortunately refused to permit an autopsy. According to the testimony of the priest, the child was born living, and lived for about an hour. The heart could be seen to contract rhythmically.—*Bulletin Médical*, August 29, 1888.

Frequent Micturition in Women.

Alexander Duke says this distressing complaint is commonly met with among women suffering from internal disease, and the diagnosis of the cause is sometimes by no means easy. In cases in which, after careful examination, the urine itself as a source of irritation can be excluded and the uterine symptoms complained of are not sufficient by reflex action to account for the continual annoyance, he has remarked in a great number of these cases an unnatural appearance of the meatus urinarius, the opening being much smaller and rounder, reminding one somewhat of the pin-hole os seen in conjunction with conical cervix uteri.

This description of case he says is comparatively easily cured by forcible dilatation of the meatus or urethral canal, but he has noticed a rather curious phenomenon to occur during the process, that is, the escape of a considerable quantity of urine when the blades of the dilator are freely opened (and this after the bladder had been but a few moments before to all appearance fully emptied by the catheter), the amount of urine escaping being fully equal in some cases to that previously removed.

Dilatation of the urethral canal he finds the most useful treatment in all cases in which the urine is normal, and spasm and irritability are complained of; but when there is a manifest want of tone in the bladder, a mixture containing tinct. of the chloride of iron, cantharides, and nux vomica has always given him satisfactory results. A blister over the sacrum has been found useful in exceptional cases. The galvanic battery he uses as a *dernier ressort*, and has had most satisfactory results in some apparently hopeless cases, one patient having worn a urinal for more than five years, night and day, previous to his seeing her.

Paralysis of Motor Bulbar Nerves in Graves' Disease.

G. Ballet (*Gazette Hebdomadaire*, No. 9, 1888) states that a man 34 years old developed all the symptoms of Graves' disease as the result of violent excitement caused by a fall into the sea. At the same time occurred hysterical symptoms—left-sided anæsthesia, diminution of the sensibility of the right half of the body, globus hystericus, etc. Subsequently the patient developed a complete exterior ophthalmoplegia and a bilateral facial palsy. Ballet thinks it is more than probable that the symptoms in this and also in other cases of Graves' disease are to be referred to a bulbar origin.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

TESTING HYPNOTICS.

One of the most interesting and instructive papers which has appeared in the medical journals for some time is that of Dr. Ottomar Rosenbach, of Breslau, in the *Berliner klin. Wochenschrift*, June 11, 1888, entitled: "Remarks on the Method of Testing Hypnotics." The greatest merit of this paper is that it discusses in an admirable way the ideas which should govern experiments in regard to the therapeutic value of hypnotics in general, and that it suggests thoughts which would be valuable if applied to similar experiments in regard to any medicament. So far as hypnotics are concerned, Rosenbach remarks that we must never fail to recognize the fact that loss of sleep may depend upon peculiarities of the individual, as well as upon peculiarities of his ailment. A careful study of these two elements in any case of sleeplessness, if successful, would furnish a clear indication as to the particular hypnotic which should be administered, while neglect of such a study would leave the physician to blind and often fruitless attempts to find out what his patient required.

One advantage of such a method as Rosenbach recommends is that it would often lead to the use of comparatively mild and relatively innocent hypnotics, instead of those more energetic ones which are likely to be followed by disagreeable after-effects. Of these, morphia furnishes perhaps the most striking illustration, and it is probably safe to say that the half is not known of the danger of an unwise use of this drug. The same may be said in regard to chloral, and it is one of the signs of a progressive spirit in the medical profession that unceasing effort is directed toward finding remedies which shall secure sleep in cases to which these remedies are but imperfectly applicable.

Among the best of those recently proposed are amylene hydrate and sulphonal, and we have acquainted the readers of the REPORTER, from time to time, with the results claimed for both of these hypnotics. The latest claimant for professional acceptance is sulphonal, which has been very strongly recommended, especially by Rosenbach, as a perfectly safe, simple, and efficient hypnotic for insomnia. It has not produced equally good results in the hands of all who have used it; but we incline to the opinion that if it were employed with the careful study of the peculiarities of the disease and of the patient which Rosenbach advises, it would not prove disappointing. Some of the disappointments which have been reported may have been attributable to the use of sulphonal in cases to which it was not suited. Others may

have been due to the administration of an impure or imperfect article. But no one could read the statements of Rosenbach as to the method he has employed in testing sulphonal without being convinced that it has very valuable properties as a hypnotic for cases of sleeplessness not due to pain or to extreme nervous excitement. Its best field of operation seems to us to be in cases of pure insomnia, and we would advise the readers of the REPORTER to give it a fair trial in cases of this sort, and to communicate their experience to their professional brethren.

THE CHAIR OF SURGERY IN THE UNIVERSITY OF PENNSYLVANIA.

Within a very short time of the announcement that Dr. William Osler had resigned the chair of Clinical Medicine at the University of Pennsylvania, the friends of this institution have been pained to hear that Dr. D. Hayes Agnew had resigned the chair of Surgery. This news was not exactly correct; but Professor Agnew has indicated a desire to lay down the duties of his office as soon as his colleagues and the Trustees of the University will consent to part with him. The pressure of his very large private practice has for some time made it very difficult for him to meet his classes regularly, and he has been able to do this only at a cost of great personal sacrifice.

The prospect of losing the benefit of Dr. Agnew's services as a teacher is one which the friends of the University must regard with deep regret, and we sincerely hope that this loss will be deferred as long as may be consistent with his personal comfort. But the fact that he seriously contemplates resigning his chair necessarily brings forward the question of choosing his successor. Already the names of a number of surgeons have been mentioned as candidates for the position, and the selection from them will undoubtedly be made only after a very active canvass.

The choice will call for the exercise of great judgment on part of the Trustees of the University, because Dr. Agnew's skill as a surgeon, ability as a teacher, and unimpeached integrity as a man have made an ideal which ought to be maintained in his successor. Whenever the time for making this choice shall arrive, we trust that it will fall upon a man who will add new lustre to the University and contribute to its further advance in the career of honor and usefulness which it has so long pursued.

CHYLURIA.

The nature of Chyluria is still so little understood, that every intelligent study of this disorder is deserving of attention. Such a study was made by the late Dr. Goltze, of Jena, and is described in a little book published last year and reviewed in the *Berliner klin. Wochenschrift*, June 11, 1888. It contains an account of the history of a patient who was for a long time under observation in the medical clinic of Jena—a hysterical woman, twenty-one years old, who had had repeated attacks of rheumatism. The most striking feature of the case was a progressive diminution of the area of liver-dullness. The proportion of fat in the urine was nearly constant, and the filtrate was usually clear. Dr. Goltze was led, by his study of this case, to the conclusion that, in chyluria, the urine is excreted in the characteristic condition, and that the condition is not due to a mixture of chyle or lymph with the urine after the latter is excreted in the kidneys.

Careful observation of the patient under varying conditions of diet led Dr. Goltze to believe that the alterations in the urine were not dependent upon the amount of fat ingested, but that they did bear a constant relation to the amount of albuminous food eaten, and that a vegetable diet was more suitable for patients with this disease.

This practical conclusion is, perhaps, the most important one suggested by this case; although it is interesting to note, and it may be profitable to follow up, the theory that chyluria is dependent upon a disease or disorder of the liver. There is much force

in the arguments with which Dr. Goltze supports this opinion, and we commend it, as well as his suggestion as to the diet of patients with chyluria, to the attention of our readers.

LAPAROTOMY FOR GUNSHOT WOUNDS.

As we have already stated in the REPORTER, May 12, p. 611, quite an animated discussion has recently taken place in Paris in regard to the propriety of immediate and exploratory laparotomy in cases of gunshot—that is to say, pistol-shot—wound of the abdomen. Dr. Paul Reclus has strongly opposed the performance of laparotomy before there are distinct evidences of perforation of the bowel or of peritonitis. His opinion rests largely upon his experience in a few cases, in which expectant treatment was followed by recovery. On the other hand, he cites only four cases of immediate laparotomy for shot-wound of the abdomen as having been performed in France.

It seems strange to find so great a difference between the practice of French and American surgeons as is shown in this matter. Here immediate laparotomy may be said to be the rule in these cases, and to be no longer a rare operation. This is due to the fact that we have now a great many surgeons who have no fear of the peritoneum, and who know how to conduct operations on the contents of the abdomen in such a way that the mere operation adds very little indeed to the risks the patient runs.

With abdominal surgery at such a point of development as it is in Philadelphia, for example, there seems no good reason why penetrating wounds of the abdomen should not be followed by immediate laparotomy, with all the advantages this can bring of accuracy in diagnosis and effectiveness in treatment.

Of course this does not mean that everybody who sees a case of this kind would be justified in doing laparotomy; but it does mean that the operation of laparotomy, properly performed, should be regarded as a relatively safe and absolutely useful procedure in the management of cases of penetrating wound of the abdomen.

TREATMENT OF PLACENTA PREVIA.

In an article in the REPORTER of May 19, 1888, Dr. Noble discusses the methods of treatment that have been employed in treating placenta previa since the days of Paul Portal, who was the first to publish the real nature of this complication of pregnancy and labor. There are many points of interest in this historical summary. Not the least interesting is the fact that Portal himself employed a very excellent plan of treatment, with good results. Indeed, had he but known and used the method of combined version, instead of internal podalic version, his method would have been hard to improve upon; for he recognized the importance of delivering the woman as soon as a diagnosis of placenta previa was established, and also the need of gentleness in extracting the fœtus. The most gratifying feature of the article is the evidence of the great reduction in the maternal mortality brought about by methods of treatment introduced during the last forty years. Instead of a maternal mortality of thirty or forty per cent., operators can show more than ninety-five per cent. of mothers saved.

In view of the present knowledge of this subject, it is painfully evident that many lives have been sacrificed to the application of false theories. *Accouchement forcé* has sent many women to their graves, from shock, rupture of the uterus, or post partum hemorrhage. The dread of undertaking premature delivery, for fear the cervix should dilate with difficulty, or version be rendered difficult, which so long influenced the profession, undoubtedly was the cause of death to many mothers and to more children. The mother might not die after any of the hemorrhages which occurred during pregnancy, but she was so weakened thereby as to be unable to withstand the shock of

the labor and attendant hemorrhage; or, escaping death from these causes, she fell an easy prey to septicæmia. The results of the practice of inducing premature labor, popularized by Greenhalgh and Thomas, have amply disproved the older views. The too-prolonged use of the tampon in unsuitable cases, without antiseptic precautions, has unquestionably swelled the death-list. Someone has remarked that the tampon gives a false sense of security. The abuse of ergot and early rupture of the membranes have also been the cause of death in some cases. The failure to employ the Braxton-Hicks method of combined version, instead of internal podalic version, is still the cause of fatal results. Time and blood are wasted in waiting for the os to dilate sufficiently to introduce the hand without violence into the uterus, when one or two fingers only are necessary, and these can almost always be introduced, even before labor is begun.

Except in cases of lateral or marginal placenta previa, or where hemorrhage is insignificant, the method of Hicks or that of Murphy should be employed. Hicks's method, in ninety-three cases, saved ninety-two mothers. Murphy lost no mothers in twenty-three cases. Each method has, theoretically, some advantages to the fœtus. By the method of Hicks, the advantages, without the disadvantages, of early rupture of the membranes are obtained. The uterus is allowed to contract down, and thus lessen hemorrhage; and, except in complete placenta previa, the placenta can ascend with the dilating lower uterine segment, thus preventing a certain amount of utero-placental separation, and consequent interference with fœtal blood-changes On the other hand, Murphy's method allows of quicker labor without endangering the mother, which counterbalances the deliberate partial separation of the placenta. Murphy's method seems to include the good features of that of Barnes. Unfortunately for the infant, no plan of treatment seems materially to improve its chances.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

CHEMICAL EXPERIMENTS FOR MEDICAL STUDENTS, ARRANGED AFTER BEILSTEIN. By W. S. Christopher, M.D., Demonstrator of Chemistry, Medical College of Ohio, Cincinnati. 16mo, pp. 84. Cincinnati: Robert Clarke & Co., 1888. Price, $1.00.

The second edition—for the sale of the book will probably demand one—of this manual for students will be better than the first, as there are numerous errata noticed at the beginning of the work, and other mistakes and discrepancies are to be found in the text.

The general plan and many of the tests of this excellent handbook have been taken from the works of Beilstein, the celebrated German physiological chemist. Most of it meets with our hearty approval, but one or two points where amendment would be advantageous may be pointed out in the interest of the author as well as of his readers. Some of the reactions given would be better understood by the student if they were more fully explained, as when magnesian fluid is used in testing for phosphoric acid; others might easily, we think, be written more simply, as the reaction No. 2 under arsenic; and one or two of the reactions described are actually wrong, as for example that in Reinsch's (not *Reinch's*) test for arsenic. Ammonium hydro-sulphide is erroneously called ammonium sulphide, and objection might also be raised to the word alkalinize. Excepting in these points, the book has much to commend it to favor. The tests are, as a rule, well chosen, and the laboratory application of preparing and using them is in some cases exceptionally good. The book is well calculated to meet the want it was intended to supply, and may be heartily commended to the notice of our readers.

A MANUAL OF GENERAL PATHOLOGY. By Joseph Frank Payne, M.D., Oxon., F.R.C.P., Physician and Joint-Lecturer on Pathological Anatomy at St. Thomas's Hospital, etc., with one hundred and fifty illustrations. Large 8vo, pp. 528. Philadelphia: Lea Brothers & Co., 1888. Price $3.50.

The preface to this very handsome book states that it is intended to provide medical students with an introduction to general pathology; but it does more than that, for it covers a wide range of subjects in a manner which carries it far beyond what might be expected of a mere introduction to this important study. It is not so full in this description of pathological histology as some of the larger works on pathology which are now accessible, but it devotes more attention to the study of etiology; and for this reason is more adapted to the needs of the general practitioner than to those of the special student of pathology. This makes the book of peculiar value to men engaged in the practice of medicine, but, at the same time, its excellent arrangement of subjects, clearness of description, and admirable illustrations will commend it, we believe, to all who wish a trustworthy and interesting guide in the study of general pathology. It is the result of careful personal observation and thorough familiarity with the work of other laborers in the same field of investigation, and may be heartily commended to the attention of our readers.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

Section of Contractured Tissues Essential Before Mechanical Treatment can be Effectual. By Lewis A. Sayre, M.D., New York. From the *Transactions of the Ninth International Medical Congress.* Vol. III. 14 pages.

On the Deleterious Results of a Narrow Prepuce and Preputial Adhesions. By Lewis A. Sayre, M.D., New York. From the *Transactions of the Ninth International Medical Congress.* Vol. III. 16 pages.

144. Address in Medicine. By Edward R. Mayer, M.D., Wilkes-Barre, Pa. From the *Transactions of the Medical Society of Pennsylvania*, June, 1888. 29 pages.

145. A Study of the Arteries and Veins in Bright's Disease. By Arthur V. Meigs, M.D., Philadelphia. From the *Medical Record*, July 7, 1888 31 pages.

146. Biennial Report of the President of the Board of Health to the Legislature of the Hawaiian Kingdom. Session of 1888. Honolulu: 1888. 87 pages.

147. A Case of Leucæmic Retinitis. By George E. De Schweinitz, Philadelphia. From the *American Journal of Ophthalmology*, April, 1888. 4 pages.

148. Some Cases of Habit Chorea, and their Treatment. By G. E. De Schweinitz, M.D., Philadelphia. From the *Transactions of the Philadelphia County Medical Society*, May 9, 1888. 8 pages.

—In this pamphlet, which is abundantly illustrated, Dr. Sayre describes what he means by "contractured" tissues as compared with what he designates as "contracted" tissues. For the former he believes that complete division must precede any attempt to correct deformity by means of mechanical appliances. The results obtainable by the method he advocates are illustrated by the description of a number of cases in which he practiced it, and the pamphlet concludes with a report of the discussion which followed Dr. Sayre's address.

—This pamphlet gives the views of Dr. Sayre upon a subject to which he called the attention of the profession nearly twenty years ago, and which led to a rather free and indiscriminate employment of the operation of circumcision in a variety of neuroses in young boys Dr. Sayre does not approve of this excess, and advises slitting the prepuce and liberating the glans rather than circumcision.

In the discussion which followed his paper, Dr. Willard, of Philadelphia, advocated stretching and retracting the prepuce as preferable to any cutting operation, and his remarks form an exceedingly valuable supplement to those of Dr. Sayre. The whole pamphlet is very interesting and instructive reading.

144. Dr. Mayer's address contains an interesting and instructive general review of the present state of medical science, but one which is hard to describe, because it covers so much ground. Those who read it will find much that will entertain them, and much which will prove suggestive in the discharge of their professional duties; for he presents many important scientific truths in an unusually attractive manner.

145. Dr. Meigs's paper, which is illustrated with thirteen representations of the microscopical appearances of the minute blood-vessels in Bright's disease, contains a scholarly discussion of the nature of this complex malady. With due deference to the opinions of other investigators, and a due appreciation of the difficulty of drawing reliable conclusions from the most carefully conducted observations, Dr. Meigs states his own opinion that the most characteristic pathological changes in Bright's disease are found in the intima of the arterioles; and he is not disposed to attribute so much importance to the alterations found in the nerves, as Dr. DaCosta does, as stated in his pamphlet which we noticed in the Reporter, Oct. 27, p. 539, 1888. We heartily commend his paper to the attention of our readers, as a very valuable contribution to the study of a disease which is still unfortunately very obscure.

146. Dr. N. B. Emerson, in this Report, presents an exceedingly interesting account of the state of public health in the Sandwich Islands, which contains, among other things, very valuable contributions to our knowledge of leprosy. It is important to note the opinion of one who has such unusual opportunities for observation that leprosy is a contagious disease, and that it is practically incurable by medication. We cannot do more than indicate the interesting character of this report, and commend it especially to the attention of those who are interested in leprosy, as furnishing valuable data for forming an opinion in regard to this disease.

147. Dr. De Schweinitz describes a case of retinitis due to splenic leucocythæmia which was under careful observation for some time at the Hospital of the University of Pennsylvania. The results of the observations made then are well detailed, and the account is a useful addition to the literature of the subject.

148. Dr. De Schweinitz, in this paper, gives an account of the history of seven cases of that form of chorea to which Dr. Weir Mitchell has applied the descriptive term "habit chorea." They admirably illustrate the advantage of correcting errors of refraction in such cases, and furnish Dr. De Schweinitz an opportunity to call attention to the importance of noticing and curing disorders of the conjunctiva when these are found associated with chorea.

Literary Notes.

In January, 1889, there will be issued from the press of A. L. Chatterton & Co., New York, a new quarterly, entitled "*The Journal of Ophthalmology, Otology and Laryngology.*" It will be edited by George S. Norton, M.D., assisted by Charles Deady, M.D. Subscription price $3.00 a year. The Journal will be devoted to original articles upon the three specialties, and, in addition to original papers by prominent writers, the material found at the N. Y. Ophthalmological Hospital will be utilized.

The University Magazine is the name of a monthly medical magazine the first number of which is dated October, 1888. This number contains sixty-eight pages, the size of that of the Reporter, with original articles from men connected with the University of Pennsylvania, and news of the various medical departments of this institution. It is likely to prove very interesting to all who have an interest in the University of Pennsylvania, and, if the promise of the first number be borne out, it will be valuable to all who are interested in the medical sciences. The price is $2.00 a year, in advance.

CORRESPONDENCE.

The Prevention of Conception.

TO THE EDITOR.

Sir: My attention has been arrested by your appeal to physicians to interest themselves in the question of the prevention of conception in the married state. You say very justly that they are often appealed to in private, but refrain from discussing the subject in the medical journals from deference to a false idea of its propriety. But the cause of good morals demands that the subject be given attention.

I suppose it will be conceded that immorality between the sexes is on the increase, that houses of assignation are often as well known as drug-stores, and that public places are full of women, who by their manners entice and furtively convey to men the idea that they share none of the fears of the modern wife concerning conception. The vice pervades our civilization. Mr. Hale, in his little book on social life in England, says that it is the rule there that young men must first settle with the mistress before they may venture to marry. Recent writers say that one birth in five in Scotch cities is out of wedlock, and in Paris one in three. In German cities it is little if any better. It may be said to be worse in our own country, in kind if not in degree, if we consider the indications of the wide-spread practice of abortion. If the whole subject were not considered so exceedingly sacred that it cannot even be mentioned, there would be some chance for young people to learn the debasing evils of prostitution and incontinence; wives might be more indeed the companions of their husbands; fewer home circles would be rent, and men generally would be freer from the temptation to go outside to satisfy nature's demands.

An eminent physician in this city, who is well known as one who treats nervous affections, a few years ago had under his care as a patient a delicate young woman who was engaged to be married. Her friends consulted him as to the propriety of her marrying, considering the state of her health. He advised that she should marry, *but that she should have no children for several years* at least, or until firm health should be established; and at the same time suggested that her affianced be referred to him for instructions. These instructions to the man were simply that he should in each instance withdraw in time to make the intercourse incomplete. The subsequent history is, that there was no child for three years; the wife became a hearty woman, stout and robust; but the man's health was so undermined that he seems to be permanently a victim to nervous affections of various kinds, and it is a question whether or not he is impotent. Though he was strong and robust at the time of marriage, he is now a delicate man. Naturally such a man is overweighted, and his mind is worried about himself, and it is scarcely to be wondered at that he lacks energy to pursue his business in successful competition with others. To my mind the physician made a grave mistake in his advice—at least so far as the man is concerned. Is it possible that the laity may look for no better advice on this subject from their medical advisers than such as I have just mentioned?

Your truly,

X. Y. Z.

Philadelphia,
October 25, 1888.

NOTES AND COMMENTS.

A Leech in the Larynx.

In the number of the *Centralblatt für Chirurgie* for May 26, 1888, there is reproduced the story of a French physician named Godet, who performed thyroidotomy upon a patient into whose larynx a leech had entered, and fastened itself below the glottis. In reading of the attempts to remove the animal, it seems singular that, before resorting to a cutting operation, an attempt was not made to overcome the animal with the vapor of chloroform. This agent has a very prompt effect upon many of the lower animals, and it seems possible that, if chloroform had been administered to the patient with her face turned downward and at a lower level than that of her body, the leech would have been narcotized and dislodged, without danger of its falling down into the trachea.

Uselessness of Günzburg's Test.

M. Constantin Paul (*La France Médicale*, Feb. 23) reports that this test for free hydrochloric acid in the gastric juice is unreliable. A small amount of sulphureted hydrogen, such as might exist in a somewhat stale egg, or an alkaline solution of phosphate of soda, as well as hydrochloric acid, gives a rose or red color with the test.—*N. Y. Med. Abstract*, August, 1888.

Creoline, Iodoform Ointment and Antipyrine in Eye-Practice.

In the *Centralblatt für Augenheilkunde*, September, 1888, Dr. Mergl states that creoline has been employed, in one per cent. solution, in acute and chronic conjunctivitis, in trachoma, and in ulcers of the cornea. In acute catarrhal conjunctivitis, the conjunctiva of the lower lid was brushed with a one per cent. solution twice a day; in most cases the redness and swelling of the conjunctiva disappeared in one or two days, the secretion lessened, but did not entirely disappear. He therefore thinks it better, after two or three days, to change the creoline solution for one per cent. nitrate of silver or sulphate of zinc. In chronic conjunctivitis creoline gave no favorable results. In four cases of trachoma the creoline appeared to act as a true specific—the redness and swelling disappeared in from two to four days, the purulent discharge in a week, and the granulations in from two to three weeks. In other cases the redness and swelling disappeared, but the granulations would not yield; in some cases the disease was aggravated. Mergl now begins the treatment of acute trachoma with creoline; if improvement does not progress rapidly, he changes it for nitrate of silver and copper. In trachoma combined with pannus or corneal ulcers, creoline is an excellent remedy; under its influence the ulcers become clean, the pannus recedes, and in conjunction with the use of atropine the ulcers are healed.

Although creoline very often brings about a cure of corneal ulcers, it also frequently fails. On the other hand, the ten per cent. iodoform-vaseline ointment employed by Dr. Kanka, is an invaluable remedy in ulcers of the cornea, especially in hypopyon. Upon the closed eye a piece of gauze spread with iodoform ointment is laid, and fastened with a bandage. Under the use of this bandage the pain diminishes, the ulcers become clean, and the hypopyon disappears in two or three days. Of fifty cases of keratitis with hypopyon under Dr. Kanka's care during two years, in only two was the pus evacuated by paracentesis. On the advice of Dr. Adolph Aldor, antipyrine was employed to clear up cicatrices on the cornea. As it caused burning, cocaine was first instilled into the eye and then the cornea dusted with antipyrine in the form of powder. After the flow of tears ceased, which occurred in a few minutes, massage of the cornea was practised. The result obtained was good. In the case of a child which, after an attack of small-pox, was affected with opacity of both corneæ, the procedure just described was employed; after three months the child's vision had increased from inability to see anything, to ability to walk alone and to recognize small objects, such as a watch and half-penny. The result was similarly favorable in two other cases.—*Wiener med. Presse*, November 7, 1888.

Transference of Syphilis by Means of a Razor-Cut.

Cheminade, Interne of the Hôpital Saint-Jean, Bordeaux, communicates a case to the *Annales de derm. et de syphil.*, No. 8–9, in which syphilis seems to have been transferred to a man by means of a razor. It seems that an officer, thirty years old, was cut with a razor in the right supra-hyoid region immediately below the angle of the jaw. The wound would not heal for a long time. Under the influence of different caustics a whitish crust was formed, which fell off and left behind an oval ulcer with indurated edges. At the same time the neighboring lymph glands became swollen. After about two months the ulcer healed, leaving a scar about one-third of an inch long. After three months mucous patches occurred on the cheeks, the arches of the palate and on both sides of the frænum of the tongue. The voice was hoarse, and there developed inflammatory œdema of the parts lying above the glottis. The lower lip was covered with syphilitic erosions.—*Wiener med. Presse*, Oct. 7, 1888.

Reduction of Subcoracoid Dislocation.

Dr. J. W. Marsee says in the *Indiana Medical Journal*, September, 1888:

"While in New York City recently I saw Dr. Bull reduce a subcoracoid dislocation of several weeks' standing, in a very simple and easy manner. The name of the inventor has escaped my memory. I have since practiced the method with very gratifying results in one case, in which the bone had been out for five weeks. After making free motions for a minute, to break up adhesions, he placed the elbow, bent to a right angle, against the patient's side, and holding it there carried the hand out, rotating the humerus until the forearm was horizontal; then holding the forearm so, carried the elbow toward the umbilicus. One effort sufficed to make the reduction; in mine two efforts were required. No force was used or needed."

Formulæ for Terpine.

M. Houdart in a recent thesis gives a good summary of the applications of terpine in therapeutics. The following are the principal formulæ (*Bulletin Médical*, August 22, 1888):

Terpine	gr. cl
Glycerine	f℥ ii

Dissolve with the aid of heat.

A coffeespoonful of this solution contains fifteen grains of terpine. It is administered in a mixture with sweetened water or syrup. The addition of alcohol makes a more complete solution. Each coffeespoonful of the following formula contains seven and a half grains of terpine:

Terpine	gr. lxxv
Alcohol (90°)	f℥ v
Glycerine (30°)	f℥ x

Dissolve the terpine with the aid of heat in the glycerine, add the alcohol, and keep in an hermetically sealed bottle. M. Houdart advises with M. Lépine to prescribe terpine as an expectorant in bronchitis in doses of seven and a half to fifteen grains, and in smaller doses in affections of the urinary passages. Increase of the dose should be avoided in patients with Bright's disease or other renal disease.

Photographing the Eye.

Although many have made repeated attempts to reproduce the appearances of disease in the eye by photography, the results have not been very encouraging. The difficulties have been so great that it has been impossible up to the present to photograph truthfully even the iris and the pupil. The chief of these difficulties has been perhaps the insufficient illumination, and it is in this respect that the magnesium flash light, so lately introduced, has proved its efficacy.

Cohn has made experiments with this light with most encouraging results (*Centralblatt für prakt. Augenheilkunde*, March, 1888). He has been able to photograph satisfactorily a pupillary membrane, a coloboma of the iris, and even the painted optic nerve of an artificial eye, as seen by the indirect method with the ophthalmoscope; and his conclusions are that, with an apparatus of sufficient precision, the possibility of photographing the living optic nerve does not admit of a doubt. His method is to mix equal parts of magnesium and finely powdered chlorate of potash with the dry finger on a piece of paper, and for each exposure to use about as much powder as can be taken between finger and thumb. He puts this on a little tin dish, having a diameter of about 15 mm. (¼ inch) and sides about 5 mm. ($\frac{1}{12}$ inch) high, and lights it with a small piece of punk stuck in the end of a stick somewhat less than a foot long. This small quantity gives quite enough light at a distance of 20–30 inches for all eye portraits, and causes neither troublesome smoke nor glare. It is so quick that the pupil does not contract till after the flash, and thus the natural size of the pupil in the dark is obtained. This is found to be very large, appearing almost as though a mydriatic had been used.

Certainly this method is a great advance, and, with the improvement which will be made in the technique, we may hope to have in this a simple and reliable means of representing diseased conditions of the anterior part of the eye—perhaps even of the fundus.—*Brooklyn Med. Journal*, July, 1888.

Albuminuria in Diabetes Mellitus.

Dr. Henry C. Coe, of New York, concludes a paper on this subject (*N. Y. Medical Journal*, July 28, 1888) with the following propositions:

"1. Albuminuria occurring in diabetes has the same import as in ordinary cases.

"2. A trace of albumin, appearing transiently or intermittently (when proved by exclusion to be of renal origin), and seldom or never associated with casts, may be regarded as due to irritation of the kidneys from the glycosuria. The immediate prognosis is good; but renal changes may subsequently result.

"3. The occurrence of persistent albuminuria and numerous casts in a case of diabetes of long standing is of grave import, as pointing to the existence of chronic nephritis; if acetone and diacetic acid are also present, the patient may die in coma at any time.

"4. Examination of the urine furnishes complete evidence of the patient's danger, even when the general condition is not such as to excite apprehension."

Sulphonal in the Night Sweats of Phthisis.

Dr. A. Martin recommends sulphonal in the night sweats of phthisis. He gives it in doses of seven and one-half grains taken before going to bed. He says it has proved very helpful, securing a quiet natural sleep lasting from four to six hours.—*Wiener med. Presse*, July 22, 1888.

Population and "The Struggle for Existence."

S. H. Mead (*Popular Science Monthly*, October, 1888) says: In Professor Huxley's article, "The Struggle for Existence," he states the obvious fact that, "so long as the natural man increases and multiplies without restraint, so long will peace and industry necessitate a struggle for existence as sharp as any that ever went on under the *régime* of war." But this promptly suggests the important modification that all classes of men do not increase equally. *Punch's* humorous statistics, a quarter of a century ago, gave to the well-to-do quarters of the town an average of only half a baby to each house. More serious observation shows, from the yeast-plant up, a steady diminishing rate of increase, pyramid-like, until the cap-stone is reached—an average human family consisting of five persons, the three children replacing the parents, with only one to spare. But the cap-stone itself diminishes to a point. The human race differs in fecundity—the worst nourished and most emotional being the most prolific, and the best fed and the best poised intellectually producing not enough to maintain their own numbers. The Dutch numbered about two millions. They created their country largely out of the ocean and survived a mud avalanche of cruelty and brute force. In South Africa, Java, New York, and elsewhere, they have been a permanent force, as well as in science, literature, arts, and arms. But their numbers have not greatly increased. On the other hand, the natives of the south of Ireland have been decimated by famines and chronic insufficiency of food. They have founded no distinctly Irish colonies anywhere, but contented themselves with adhering closely to Anglo-Saxon communities in all parts of the world, which contact they declare to be injurious to them. It is asserted that their numbers have increased in recent times from about six millions to thirty millions, more or less. Eminent men, like George Washington, leave few if any descendants. Napoleon, as the fruit of two marriages, had one child. Hardly any of the peerages in the House of Lords, consisting of some four hundred members, are more than two hundred years old, and if, as proposed, no new peerages should be created, the hereditary legislators would become extinct—the object aimed at by the proposal. The present tendency of civilization referred to by Huxley, to sacrifice the best to the worst perpetually, would seem at first sight to reduce the whole to a dead level of the worst possible. But further reflection shows the effect to be to raise the whole mass from the bottom. If the mass can be well fed, refined, and intelligent, nature will no longer throw off such frightful numbers of rudimentary men, but will be as niggardly of human beings as she now is chary of perpetuating great intelligences. In this direction there is hope that the problem may be solved.

Condensed Milk in Infant Feeding.

Dr. Charles W. Drew concludes an article on condensed milk in infant feeding in the *Northwestern Lancet*, September 15, 1888, with the following words:

"The question therefore presents itself to the conservative physician and to the mother and nurse, whether there is in any ordinary case sufficient advantage in the use of condensed milk as an infant food, to warrant them in assuming the risk of continuously administering as a substitute for mother's milk a mixture containing thirteen per cent. of its weight of such an undesirable and possibly deleterious constituent as cane sugar, as they must do if the condensed milk is simply diluted to the point of furnishing the proper percentage of fat, casein and salts which experience has proved to be necessary for the growth and development of the child. It is impossible for a single logical argument to be adduced in support of such a proceeding, and it must be concluded that from all the evidence attainable by a full study of the chemistry of the subject, that the use of condensed milk in infant feeding is unwarranted, and should be disapproved and discouraged by all conservative physicians."

Hunyadi Janos Water.

Dr. Dieterich, in the *Pharmaceutische Centralhalle*, gives the following formula for making the artificial water:

Potassium sulphate	0.5 parts
Sodium chloride	14.0 "
" bicarbonate	52.0 "
" sulphate, dry	180.0 "
Calcium sulphate, precip.	15.0 "
Magnesium sulphate, dry	24.5 "
Iron sulphate, dry	0.2 "

Taken in grammes the above will produce 10 liters (10½ quarts) of the artificial water.

Dose, put a tablespoonful of the salt into a half-pint bottle, fill it half full of water, dissolve by shaking, then fill with carbonic acid water.—*Pharmaceutical Era*, October, 1888.

Medicated Biscuits.

This form of medication, says the *Chemist and Druggist*, Sept. 22, 1888, is often used on the Continent, especially for children. The usual way is to give to a pastry-baker the medicines in the shape of powder, to be mixed with the biscuit-paste and divided into a given number of cakes. As an accurate division is thus seldom secured, M. A. Xanthopoulos, of Makri-Keni, Turkey, has proposed the following process, to be executed by the pharmacist himself. Take the medicine prescribed, mix it with four times its weight of powdered sugar, and divide into the requisite number of doses. Now spread each powder with a brush on the spongy side of a well-baked biscuit, and apply over it a coat of thin mucilage. After drying in a warm place, the cakes may be dispensed. To give a better finish, a little powdered starch and sugar may be dusted over the medicated side before the mucilage is quite dry. M. Xanthopoulos recommends the process as a quick and convenient one, affording all the accuracy necessary in the exhibition of medicines.

Psychic Effects of Hasheesh.

Mr. A. M. Fielde has recently recounted his experiences under the influence of hasheesh. He smoked the hasheesh until he felt a profound sense of well-being, and then put the pipe aside. After a few minutes he seemed to become two persons: he was conscious of his real self reclining on a lounge, and of why he was there; his double was in a vast building made of gold and marbles, splendidly brilliant, and beautiful beyond all description. He felt an extreme gratification, and believed himself in heaven. This double personality suddenly vanished, but reappeared in a few minutes. His real self was undergoing rhythmical spasms throughout his body: the double was a marvelous instrument, producing sounds of exquisite sweetness and perfect rhythm. Then sleep ensued, and all ended. Upon another occasion, sleep and waking came and went so rapidly that they seemed to be confused. His double seemed to be a sea, bright, and tossing as the wind blew; then a continent. Again he smoked a double dose, and sat at his table, pencil in hand, to record the effects. This time he lost all conception of time. He arose to open a door: this seemed to take a million years. He went to pacify an angry dog, and endless ages seemed to have gone on his return. Conceptions of space retained their normal character. He felt an unusual fulness of mental impressions—enough to fill volumes. He understood clairvoyance, hypnotism, and all else. He was not one man or two, but several men living at the same time in different places, with different occupations. He could not write one word without hurrying to the next, his thoughts flowing with enormous rapidity. The few words he did write meant nothing. This experience admirably illustrates the close relationship between states of real insanity and transitory affections induced by psychic poisons.—*Science*, Oct. 12, 1888.

Cremation of Filth at Montreal.

The Albany Board of Health is considering the use of crematories for garbage and night soil, and the Health Officer, Dr. Balch, recently made an inspection of those at Montreal which he describes as follows:

These crematories are worked under a patent owned by William Mann, of Montreal, and consist of two different plants. The one for garbage is situated in a thinly-settled part of the city, and consists of a brick furnace into which the garbage is received from an upper floor, while the fire-box is on the floor below at one end of the furnace. The garbage falls from the upper floor to grates within the furnace, and the fire is allowed to pass over, evaporating the moisture, which allows of the garbage itself igniting as soon as it becomes perfectly dry; the ashes resulting (from the combustion) fall through the grate bars, where they are removed to be used as filling. The chimney at the opposite end of the fire-box is about eighty feet high. No perceptible smell was present, and no complaint from the neighborhood had been received that the smoke caused any nuisance. The crematory for night soil consisted of two furnaces upon a single chimney, and was in the main similar to the one for garbage, except that no grate bars were placed within the furnace, the night soil being allowed to rest upon a raised floor over which the fire passed in the same manner as already described. The probable cost of erection for a furnace sufficient to destroy the garbage in Albany, including the cost of the patent, would be about from $4,000 to $5,000. The fuel used is the cheapest kind of soft coal and coal screenings, and the amount needed about two tons a day. It will require, he says, three or four men to do the necessary work at the plant.—*Engineering and Building Record*, October 20, 1888.

Treatment of Malarial Cachexia.

Dr. J. J. Mulheron says that in the cachexia which ensues on the prolonged action of the malarial poison the ferruginous tonics and the medicines known as alteratives, are indicated. The following, which he says might be known as the tincture of the five chlorides, is an excellent combination for this condition, as it is in poverty and depravity of the blood from any cause.

℞ Hydrarg. chlor. corrosivi . . gr. ii
Tr. ferri chloridi,
Acidi hydrochlorici dil. . . āā f℥ iii
Liquoris acidi arseniosi . . . f℥ iss
Potassii chloridi . . . . . ℥ ss
Syrupum simplicem . . q. s. ad f℥ vi

M. Sig. A teaspoonful in water four times a day.

He calls attention to the fact that it is the chloride and not the chlorate of potassium which is called for in this prescription. He thinks the average druggist will require to have his attention especially directed to this fact. The chloride of potassium, he says, is a peculiarly valuable salt in the treatment of anæmia. The necessary regulation of diet, hygienic precautions, etc., must, of course, receive attention.—*Medical Age*, Sept. 25, 1888.

Formula for Gastralgia and Vomiting.

Ewald, says the *Wiener med. Presse*, September 23, 1888, advises the following formula in hysterical hyperæsthesia, gastralgia and vomiting:

℞ Morph. muriat. . . . . gr. iii
Cocaini muriat. . . . . gr. ivss–viiss
Tinct. belladonnæ . . . . . ♏lxxv–cl
Aquæ amygdalæ amar. . . . . f℥ vii

M. Sig. Ten or fifteen drops to be taken hourly.

Cannabis in Graves' Disease.

Rafaele Valieri, of Naples, has successfully employed cannabis in three cases of Graves' disease, after all other means had been tried without effect. The following are the formulæ he employed:

℞ Cannabis . . . . . gr. ivss
Sacch lactis q. s. ut fiant pil. No. V.
Sig. To be taken in 24 hours.

℞ Cannabis . . . . . gr. ivss
Aquæ destill. . . . . f℥ iii
Syr. flor. aurant. . . . . f℥ viiss

M. Sig. To be taken in tablespoonful doses in 24 hours.

—*Wiener med. Presse*, October 7, 1888.

Cincinnati Polyclinic.

The Cincinnati Polyclinic was organized October 31. Dr. Charles A. L. Reed was elected Dean of the Faculty; Dr. Longstreet Taylor, Secretary; Dr. Rufus B. Hall, Treasurer. The Faculty consists of: Drs. A. C. Kemper and E. W. Mitchell, in Internal Medicine; Dr. H. W. Rover, in Pædiatrics; Drs. Edwin Ricketts, Rufus B. Hall, and Charles A. L. Reed in Gynæcology; Drs. A. B. Thrasher and J. H. Boylan in Laryngology; Drs. A. Ravogli and M. Ricketts in Dermatology; Dr. Robert Sattler in Ophthalmology; Dr. Longstreet Taylor and Wallace Neff in Surgery, including Genito-Urinary Diseases.

Almost the entire Faculty are teachers in one or the other of the three Medical Schools of Cincinnati, and the majority of them hold important hospital appointments. A large clinic has already been developed.

NEWS.

—An International Congress for Criminal Anthropology will be held in Paris, August 4–8, 1889, under the honorary presidency of Prof. Brouardel.

—The *Medical Standard*, Nov., 1888, states that there are 80 patients with typhoid fever in the Chicago County Hospital, in a total of 486 inmates.

—There were 28 new cases and 3 deaths from yellow fever at Jacksonville, Fla., Friday, November 2. Eight cases have been reported at New Decatur, Alabama.

—A strange accident happened to a man in Asheville, S. C. He was trying to pull off a tight-fitting boot while sitting in a chair, when his right femur was broken by the strain.

Dr. George H. F. Nuttall, of San Francisco, has been awarded the Boylston prize of four hundred and fifty dollars for his essay entitled: "A Contribution to the Study of Immunity."

—Dr. McCully, of Toronto, discharged a revolver into a crowd of medical students who had gathered in front of his house and were behaving in a riotous manner. One student was shot in the leg.

—The *St. Louis Med. and Surg. Journal*, Nov., 1888, says that in Turkey, by decree of the Sultan, as soon as a physician dies his diploma must be turned over to the authorities, who return it to the college from which it was originally received.

—We learn from the New York *Medical Record*, November 3, 1888, that the hospital Saturday and Sunday collections in that city last year amounted to $50,449.15. Of this amount $28,626.79 was from religious sources and $21,822.36 from secular sources.

—Dr. Frank L. Wyman, of Olneyville, Rhode Island, has been awarded $17,000 damages from the Union Horse Railroad Company for injuries received by being hurled from the front platform of a car, which was driven at great speed in rounding a curve.

—During six months of high license, the number of saloons in Paterson, N. J., is said to have been decreased by 125, and the receipts from licenses increased by $40,000. It is estimated that the taxpayers will be relieved of taxes to the amount of $100,000 a year from the increased revenue from licenses.

—The Council of Public Hygiene for the department of the Seine, Paris, at its meeting October 13, appointed a committee to obtain information concerning the value of vapor of turpentine as a prophylactic against the necrosis from phosphorus which occurs among workers in zinc. MM. Trost, Lancereaux, Trélat, Brouardel, Riche and Poligot are on the committee.

—The *New York Medical Journal*, Nov. 3, 1888, expresses the opinion that the chewing of gum may be advantageous under certain circumstances, inasmuch as it increases the secretion of saliva, and thus may, if used at the proper time, materially assist the digestion of amylaceous food. It also serves to cleanse the teeth, and may exert a wholesome influence upon the pharynx in catarrhal conditions.

—In commenting upon a suit for damages brought against a physician by the parents of a child which died after taking a mixture containing antipyrine and sweet spirits of nitre, which was prescribed by the physician, the *National Druggist*, November, 1888, declares that the crystalline deposit (isonitroso-antipyrine) produced by the union of these two agents is not poisonous. The Editor says he has tested its toxicity upon himself, as well as upon the lower animals.

PEOPLE WHO ARE NOT FAMOUS can become so and have their pictures put in the papers by signing a medicine paper and certifying they have been cured of a terrible disease they never had.

HUMOR.

AS DELICATE a charity as I remember was the act of a gruff, taciturn old physician in a Colorado mining town. A poor, aged parson was carefully attended by the irritable doctor. When the preacher had sufficiently recovered to dispense with further medical attention he asked for his bill. "Your bill? Here it is," said the doctor, opening his pocket-book and handing the minister's wife a $10 bill.—*America* (*Chicago*).

CUSTOMER—"That was splendid insect powder you sold me the other day, Mr. Oilman." Mr. Oilman (with justifiable pride)—"Yes, I think it's pretty good—the best in the trade." Customer—"I'll take another couple of pounds of it, please." Mr. Oilman—"Two pounds?" Customer—"Yes, please. I gave the quarter of a pound that I bought before to a black beetle, and it made him so ill that I think if I keep up the treatment for about a week I may manage to kill him."

WOULDN'T DRINK ANY.—Old Jefferson Catnip, upon his first visit to the city, went with a friend to a restaurant. While they were sitting at a table a young fellow, carrying a lawn tennis racquet, came into the room. Old Jefferson, after regarding the instrument for a few minutes, turned to his friend and said: "John, I drink no milk in this town." "Why not?" "Why not? Jest look at the strainers they use. Why, you could shove a catbird through 'em."—*Arkansas Traveler.*

DIED.

Clara Lucile Sundberg, *née* Blackman, wife of Dr. John C. Sundberg of San Francisco, California, October 21, 1888.

OBITUARY.

R. LEONARD, M.D.

Dr. R. Leonard, of Mauch Chunk, a prominent physician of Carbon County and President of the Lehigh Valley Medical Association in 1884, was killed by a passing train while walking home from a visit to a patient, shortly after midnight on the morning of October 26. Dr. Leonard was graduated from the Vermont Academy of Medicine in 1845. He was a member of the Carbon County Medical Association, and one of the surgeons to St. Luke's Hospital, Bethlehem, and was 65 years of age at the time of his death.

THE

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Clinical Lecture.

FISTULA IN ANO; LARGE SEBACEOUS CYST OF THE SCALP; LIGATURE OF THE FEMORAL ARTERY FOR ANEURISM; AMPUTATION—USE OF RELAXATION SUTURES.[1]

BY JOHN H. PACKARD, M.D.,
SURGEON TO THE PENNSYLVANIA HOSPITAL.

(Reported by William H. Morrison, M.D.)

Fistula in Ano.

Gentlemen: The first patient I shall bring before you to-day has an anal fistula, sometimes called a fistula in ano. A false passage exists, opening by one end within the bowel, by the other on the surface of the skin near the anus. The history of this case is obscure, but probably the lodgment in one of the rectal pouches of some insoluble matter, such as a seed, for instance, has given rise to abscess, the breaking of which externally has established an abnormal channel or sinus. Sometimes very little pain results from such a condition; but this man suffers greatly, and desires relief. The radical way of affording this is to divide the bridge of tissue which overlies the sinus, and make the gap heal up from the bottom.

Not very long ago it was thought necessary always to dissect out the wall of the fistulous passage; and this is still the popular idea of the operation. Such a procedure is required in some cases in which the callous tissues bordering the sinus, which has been of long standing, would be very slow in healing. An instance of this kind occurred to me recently; the anus was nearly surrounded by a canal with very firm, almost cartilaginous walls. Under antiseptic precautions, I dissected all these away with a knife and curette, suturing the margins of the extensive wound thus produced, and then applying an antiseptic dressing.

In the present case, I pass a grooved director through the fistulous opening, and bring its point out at the anus. In order to do this, I put my other index finger into the rectum, to guide the tip of the instrument; not finding the inner orifice of the fistula, I push the end of the director through the thin wall, and now bring it out easily. I now pass a curved bistoury along the groove, and divide everything until the director is completely freed, cutting through nearly the whole thickness of the external sphincter muscle. Now (and this is a very important point) I explore the wound carefully with my finger to make sure that there are no sinuses extending in other directions. Finding none, the operation is completed by packing the wound with lint and iodoform ointment, and applying a T-bandage.

Large Sebaceous Cyst of Scalp.

This man has, as you see, a tumor about as large as an egg on the side of his head. It is what is generally called a wen, and is nothing more than a retention-cyst developed from one of the sebaceous follicles of the skin. Such tumors are often met with in this region, the scalp containing a great many sebaceous follicles. Sometimes they

[1] Delivered at the Pennsylvania Hospital.

attain a very much larger size than the one now before you.

Growths of this kind are quite harmless, but are inconvenient and unsightly. Occasionally they inflame and suppurate, and then there is danger of absorption of the products of inflammation, causing blood-poisoning. The density of the skin renders the divided veins liable to gape, and pus or even putrescent materials may be carried into the circulation. Erysipelatous inflammation, extending to the membranes of the brain, and sometimes involving the brain-substance itself, was formerly a not infrequent result of operative interference in these cases. With our present methods the danger of this sequel is set aside.

This man's scalp has been carefully shaved and rendered aseptic in the way familiar to you; and I will now divide the skin over the tumor, turn the flaps aside, and dissect out the cyst entire. There is not any bleeding of consequence. As the skin is somewhat redundant, a portion of it is clipped away; not too much, lest there should be tension upon the edges. Catgut, for drainage, is now laid in the wound; the edges are brought together and sutured with catgut; protective, iodoform, sublimate cotton and a bandage complete the dressing.

Ligation of the Superficial Femoral Artery for Aneurism.

This patient has an aneurism of the left femoral artery just below Hunter's canal; that is, just as the vessel emerges from the mass of the great adductor muscle. He does not know to what to attribute the aneurism, but has been aware that something was wrong with the part for some eight or nine months. He denies that he has ever had syphilis, or any other form of venereal disease; and while in very many cases the occurrence of aneurism is the result of degeneration of the arterial walls by syphilitic change, its existence is not at all to be assumed as proof of such change. In the present instance we may accept the patient's statement, and suppose that under some excessive strain the walls of this vessel yielded.

I shall not take up your time with a discussion of the various forms of aneurism, which will be described to you elsewhere. We have before us a dilatation of the artery, forming a tumor perhaps as large as a walnut, pulsating strongly, and giving the impression that its wall is thin. Left to itself, the wall would become more and more thinned, until it would give way, and there would be a diffuse hemorrhage into the tissues of the limb. If the rupture should take place through the skin, enough blood would soon be lost to deprive the patient of life. To prevent either of these accidents, I am going to stop the flow of blood through the distended portion of the vessel, which will become full of clot; this will organize into a solid mass. and the nutrition of the parts supplied by this vessel will be carried on by the blood flowing through the branches of the profunda. There are various ways of effecting this closure, but the one I shall adopt in this case is the tying of the trunk of the vessel where it is healthy, above its entrance into Hunter's canal.

Standing on the outer side, I begin at a point seven inches below Poupart's ligament, and carry an incision upward for three inches along the inner edge of the sartorius muscle. Drawing this muscle outward, I work down with my fingers and knife-handle, and come almost immediately upon the vessel, beating under my fingers. A small nick made in the sheath enables me to pass a grooved director under the vessel from within outward; the director is curved, with the groove in the concavity, and along the groove I carry a short, blunt, curved needle armed with the ligature, which is thus placed in position. The two ends of the ligature are now lightly closed in a single knot, when the pulsation in the tumor is found to be arrested. The knot is therefore drawn tight, and another one made, securing the vessel. Both ends of the ligature, which is of thick catgut, are cut off short; the wound is closed with sutures, catgut for drainage being first laid in it, and antiseptic dressings are applied. The limb will be, for a few days, wrapped in cotton; and the patient will be kept at absolute rest.

There are very few surgical procedures in which an accurate practical knowledge of anatomy is more essential than in the ligation of arteries. The object of the operator must be to expose the artery and apply the ligature with the least possible disturbance of the tissues. He must know where the artery is to be sought, and what its relations are to the vein or veins and nerves which accompany it. I think I have seen more difficulty encountered in the tying of the subclavian artery than in any other simple surgical operation. On one occasion I saw an experienced operator about to tighten his ligature about one of the heads of the median nerve, when a bystander asked him if he was sure it was the vessel, and fortunately the error was corrected.

Amputation—Use of Relaxation Sutures.

The case which I next bring before you is one which you saw two weeks ago. You will remember that the man had fractured his left femur on two occasions within a period of eight months. At that time I told you that I should amputate the thigh at the next clinic. Two days after you saw him, it was found that he had had some hemorrhage. I therefore decided to call a consultation as the danger of further bleeding was imminent. It was then determined that the operation should at once be performed. Since the amputation the patient has done well. You see that the appearance of the wound is satisfactory. I call your attention to the fact that we used a relaxation suture placed three inches from the edge of the upper flap and one and three-fourths inches from the edge of the lower flap. The mark which it produced can still be seen. This mark is evidence that the relaxation suture was needed and that it held the flaps together. The use of relaxation sutures in amputation wounds brings the deeper parts together and facilitates their union. It also prevents the accumulation of serum and of the products of inflammation, and obviates the risk of tension upon the superficial sutures uniting the edges.

HYSTERICAL DYSPHONIA; EMPYEMA; THE GOUTY DIATHESIS.

BY BEVERLEY ROBINSON, M.D.,

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Hysterical Dysphonia.

Gentlemen: I saw this young woman for the first time yesterday. She tried to tell me her history, but I was unable to understand her, and a friend who accompanied her had to explain what she wished to say. When asked what is the matter, she tries to speak, but it is in a very low whisper which can scarcely be understood. She spoke a little better yesterday, and also this morning. She has had loss of voice about two weeks. During that time she has had no cough, no cold, no pain in the chest, no fever. Last winter she was "hoarse" in a similar way for ten weeks, the difficulty commencing suddenly and disappearing suddenly. It is supposed that it then began with a little cold. It is extremely rare during acute inflammation of the laryngeal mucous membrane to have as complete loss of voice as this patient has. If such loss of voice occurred during an acute laryngitis there would probably be more or less cough, fever, difficulty of breathing, some noise in inspiration and expiration, and oppression over the chest. Occasionally loss of voice follows a cold, and the symptoms just mentioned are absent; but this is rare. The condition of this patient may be only nervous, that is to say, hysterical; but what that is, we do not know. On asking her whether she has a lump in the throat, or a pain in the top of the head, she says she has not; her monthly periods are normal. These facts do not point toward hysteria. She says she laughs and cries readily, but she laughs only when things please her, and cries only when injured or displeased. Some hysterical women, you know, laugh when hurt, and cry when pleased. On inquiring whether she had any great fright or strong emotion when she lost her voice, she replies that it occurred when she experienced a great pleasure. Thus it would seem that her difficulty with speech is at least partly emotional.

Incidentally I might mention the case of a young woman who had lost her voice completely for ten months. During that time she had been given cough mixtures and a variety of remedies, but her voice did not return. Recognizing her trouble as nervous, I treated her for a short period and succeeded in completely restoring her voice; she has not failed for five or six years to express her thanks annually for the service I rendered. Before I became a general practitioner I saw a good many distinguished singers for throat difficulties, and I will allude to one case in which a lawsuit had developed between the singer and her manager. The physician who had been called in had said that she was unable to sing because of congestion of the vocal cords; but he had not examined her larynx. He had only assumed that because she had lost her voice she had congestion of the cords As far as I can remember, there was no reason for supposing that there was congestion of the cords other than the loss of voice. I was called in as an expert, and on examination found the cords white, and showing no sign of congestion. Thus you will see that a positive diagnosis of congestion of the cords cannot be made without a laryngoscopic examination. I made such an examination yesterday in the patient before us, and found the cords white. But when she attempted to speak she could not bring the free margins of the cords directly

together. It would now seem that her inability to speak was due to the effect of joy; it might have been due to grief. If she had given a history of a cold existing a week or two before the occurrence of loss of voice, that might account for it. Some of the most obstinate cases of loss of voice which I have seen followed a cold, and were due to loss of power in the muscles of the larynx.

In the case before us I believe I can restore the voice at once; that I can make the patient talk by introducing this applicator into her larynx. [Dr. Robinson assured the patient she would be able to talk. On introducing the applicator down to the larynx and quickly withdrawing it, he commanded her to count: "one, two, three"; and after gentle but firm urging she repeated the numbers in a clear voice.]

I had a friend once who received a large fee by restoring the voice of a patient in this way. His success resulted only from a mental impression—the conviction being forced upon the mind of the patient that she could and would speak. Wishing to reserve this experiment for to-day, I had to give her something yesterday, and chose a stimulant for the vocal cords, consisting of:

Tinct. benzoin. comp.,
Ol. pini sylvestris,
Acidi carbol. liq.,
Tr. iodi comp. . . . . āā f ʒ ii

M. Sig. Use half a teaspoonful to a pint and a half of hot water as an inhalation four or five minutes every two or three hours.

Of course the patient should not be allowed to go into the cold air for a while after the inhalation. The inhalations can be made by placing a newspaper cone over a pitcher containing the hot fluid. There is nothing better to allay irritation of the larynx than compound tincture of benzoin, and to this may be added the firwood oil; but there is no necessity for the carbolic acid or compound tincture of iodine. If the patient had had acute inflammation of the larynx I should have used compound tincture of benzoin alone.

What more should I do for this patient? Well, I learned from a woman the other day that a mixture of sweet oil and mustard makes slight irritation, and can be kept on the skin over-night without distress to the patient. I think I would try that in this case, placing the poultice on the neck over-night, which would act as a counter-irritant and help restore tone to the larynx, especially to the crico-thyroid muscle. I might have put on iodine, or a plaster, or a fly-blister, but I had mercy on the patient and tried the milder measure first. But repeating a fly-blister over the neck might have a very good effect in restoring the voice, if it could not be done in a milder way. Although the measures resorted to in her case did not restore the voice, yet the general practitioner is likely to go on with their use until he loses credit with his patient and her friends. There are a number of stimulating remedies which women know about, and one will declare her ability to restore the voice, for instance, by a mixture of lemon-juice and white of egg—which might succeed, and if it did not it would do no harm—or by a piece of borax in the mouth, or a piece of nitre. An ounce of the wine of coca, or the touch of a sponge-applicator, may also succeed. If the patient had been at my office I should probably have put an astringent on the applicator before introducing it, in order to increase the mental effect. You must influence the patient's mind, and a good way to do that is to apply electricity to the vocal cords. Place a necklet around the patient's neck with a brass plate over the tensor muscle, which is the seat of one pole, while the other is applied directly to the cord by the aid of a laryngeal mirror and a strong light. Test the strength of the current beforehand by touching it to your tongue. Apply it for a few seconds until the patient chokes, then take it out, and repeat the process several times. Give a sitting every other day for a week or longer, and the voice will return and continue to grow stronger until it becomes normal. If you can not do this, then use Faradism outside, employing a mild current. Benzoic acid lozenges are of use in these cases. They are preferably made up with black currant paste, a grain of benzoic acid in a lozenge. One may be taken every hour or two.

The differential diagnosis will suggest itself to each of you. You might search for an aneurism, or for diphtheritic paralysis, or acute laryngitis. But nothing will be of greater aid to you in these cases, and indeed in the general practice of medicine, than the ability to make a laryngoscopical examination. Such examination will often be of service, and inspire your patient with confidence. In cities, it is true, there are such minute divisions of specialties that one is not expected to use all the measures of diagnosis and treatment which might be of much advantage in practice in smaller places, where it is less convenient to send patients to specialists.

Empyema.

Dr. J. B. Kennedy, of Long Island City, sent me this patient with the following note: "I first saw the patient on the 19th of last June. He had a temperature then of 104.5°, and a pulse of 120. There was pain in the right side. Three days later there were signs of fluid in the pleural cavity. I waited a day or two, then put in the hypodermic needle and drew off pus from the right pleural cavity. I then aspirated and drew off nine pints. The fluid reaccumulated, and within a week I drew off seven pints more." A few days later Dr. Kennedy made an opening into the pleural cavity and put in a drainage tube, which remained in position until a few days ago. Dr. Kennedy was good enough to send the patient to me to ask my opinion on two points: First, as to the propriety of reintroducing the drainage tube; second, if the patient will be likely to become phthisical.

The drainage tube fell out while the Doctor was dressing the wound. Is that a good indication or a bad one? I should call it a relatively good one, for it probably fell out because the pleural cavity was small—it was closing up, the tube did not pass in far, and consequently fell out. We want the pleural cavity to become closed by recession of the chest walls or expansion of the lungs, or both, and plastic adhesion of its walls. But I cannot say, until after an examination of the patient, whether or not that was the cause of the falling out of the tube. The patient says he has a good appetite, and that he has no cough; he is gaining flesh, there is no elevation of the temperature. The external opening, as you see, has closed. It was situated a little outside the right nipple—rather an unusual place for a spontaneous opening to occur. Dr. Kennedy might have seen pointing taking place there, and therefore have chosen it as the place to make his opening. Anyone can make the opening in a case of empyema, unless it is intended to take out a section of rib. Adults, as a rule, do not recover without an operation, with or without exsection of a rib.

On looking at his chest we find it is pretty well developed on the left side; the left lung should be well formed, for it has been doing more work than normal. On the right side, the walls of the chest are less retracted than would be expected from the history. I assume the reason of this is that the lung has expanded. How is that to be determined? By percussion; and yet per cussion will not help much, for there is a thick membrane covering the lung arising from the pleuritic exudation. I hear respiratory sounds all over the right side anteriorly and posteriorly, but there is greater dulness beneath the axilla. Nevertheless the lung is pretty well expanded, and the rational history is good. How can we tell whether or not there is any fluid in the right pleural cavity? No man can tell positively that there is none unless he aspirates. On introducing the needle of the hypodermic syringe I am unable to obtain any fluid We conclude then that the cavity has completely closed.

Now the practical question arises, Will this young man have phthisis? There is no sign of it at present. He is gaining weight; has no cough; the pleural walls are healing up; he has no inherited history of phthisis. But you ask, Why did he have empyema? There are a good many cases in which empyema develops as such from the very beginning, and not as a result of acute or subacute pleurisy; in other words, the acute or subacute pleurisy is an empyema from the onset. It may not be possible to account for it by the history, by the surroundings and accidental circumstances, yet empyema may develop from the start. This young man says he lives in a damp house on Long Island. I have told him that he is very likely to have phthisis sooner or later unless he guards against evil habits, such as drinking, especially of bad whiskey, sitting up late, smoking tobacco, etc. Whatever else he may do, he should move into a perfectly healthy locality, where there is no malarial poison, no sewer gas, but plenty of sunlight and pure air. If he will observe these instructions for a year, and manage to keep up good nutrition, I think he will escape phthisis. But if he exposes himself in the ways mentioned, or if he becomes overfatigued, or catches a cold, he will probably be attacked at a point where there is least resistance, and it will probably be in the pleural cavity. If he again develops trouble there it will be a suppuration, and will probably end in tuberculosis sooner or later.

If his appetite fails, he should be given tincture of cinchona; if he loses flesh, cod liver oil should be administered; if tubercle bacilli are found, I should use creasote internally and by inhalation. At present I have greater faith in creasote than in any other agent in phthisis, although of itself it will not cure the disease

The Gouty Diathesis.

This old man has gout and asthma. Seeing that other measures gave him little

relief, and learning that he had been troubled with gout, I determined to treat the latter, and gave him an alkaline mixture and colchicum; but it has apparently done him little good. He has some heart trouble, an old fibrous bronchitis, emphysema, old age, and conditions which cannot all be cured at once.

I have under my care a lawyer in comfortable circumstances, who lives a somewhat sedentary and intellectually laborious life. He had no family, and gout manifesting itself I sent him to Europe, where he spent the summer of 1888 under the care of a medical man, who told him he might return in the fall and that he would be able to pass the winter in New York without further trouble. The patient felt very cheerful after this counsel, but he had not been in New York long before he was seized with an attack of dyspnœa, which induced him to come to me. I examined him carefully all over, but could find nothing to account for the trouble. Having known him in the past, however, I was convinced that his trouble was gout. He had some dyspeptic symptoms which I treated, and with benefit for a day or two, so that he thought he was all right; but I had my doubts. Soon he returned with the same difficulty in breathing I told him I believed the dyspnœa to be an expression of the gouty diathesis, and that he needed treatment for gout. I gave him colchicin, night and morning, and after three or four days he became better, and is now feeling quite well; but he is still eliminating oxalates and urates in excess. That man had no expression of gout other than the dyspnœa, yet the latter was certainly of gouty origin and would not improve without a recognition of the gouty diathesis.

My object in showing this aged patient to you is to call attention to the fact that the underlying cause of a symptom must be reached, otherwise treatment will be unsatisfactory.

—In order to avoid acrimonious and fruitless discussions, the Glasgow Pathological and Clinical Society requires that every communication made to it shall be accompanied by a specimen of some kind (if only a pathological product, a drawing, or a patient), so that, whatever opinions and theories may be raised with reference to the communication, the specimen can always be referred to and recorded as a fact.

COMMUNICATIONS.

ON SOME MILD MEASURES IN THE TREATMENT OF INTRA-NASAL HYPERTROPHIES AND INFLAMMATIONS.[1]

BY W. H. DALY, M.D.,
PITTSBURGH, PA.

In the early part of the present decade, when American laryngology was, in a figurative, general sense, in its first short clothes, the intra-nasal structures comprised a region upon which the profession—even those of us who were then freshly budding laryngologists—rarely ventured surgically without a misgiving that we were doing something that was unorthodox. These were the days when the war-cry had not yet been sounded by the pioneers on the out-posts to attack the enemy in the nose; that here some of the chief destroyers of mankind lay hidden; that in the interior of these curled, irregular, and mysteriously arranged chambers and their more adjacent cavities, the antra, frontal sinuses, and ethmoidal cells, lurked many of the sources of fleshly ills from the myxomatous polyp to the predisposing cause of hay asthma. In these days, you will remember, our armamentarium did not include so many of the instrumental devices for working in the nose as have since been given to us by the fertility of our collaborators; and, as my lot was cast in "out of the way" Pittsburgh, where instrument makers were not convenient, much of my work upon the interior structures of the nose was done with serrated edged scissors of my own pattern. And by the way, I am very fond of using the same instruments yet, whenever I can adapt them to the work in hand. I was upon one occasion, during these earlier times, consulted by a brawny iron-worker, who complained of compulsory mouth-breathing. Upon examination I found the difficulty was caused solely by a bagging hypertrophy of the soft tissues, over the inferior turbinates, anteriorly, in each nostril. The patient said that he had hunted for my office all over the city, and insisted on having something radical done at once.

In my disposition to oblige his importunate demands, I proposed that I should with the angular serrated scissors cut off the bagging hypertrophy in one nostril, then

[1] Read before the American Laryngological Association at its meeting in Washington, D. C., Sept., 1888.

plug the cavity with a styptic cotton plug upon a piece of rubber tubing, and asked him if he could stand a little cutting, to which he answered lustily: "Yes! I am no boy. I can stand to have my head cut off." Everything in readiness, I proceeded, when at the first crush of the scissor blades, and before they had met in the tissues, the patient yelled for me to stop, and laying hold of my hands, withdrew the scissors from his nose, and then fell to the floor, fainting. As he slowly recovered from this condition, by my elevating his feet, the blood began to flow in the most alarming manner from the wounded tissues, and in this state it was with difficulty I restrained him from running out of my office. He persistently refused to allow me even to look into the cavity again.

I am not sure whether the alarming hemorrhage finally ceased from my external compression on the alæ nasi, or the exhaustion of the patient, since he would not allow me to plug the nostril. He left as soon as he could get away, with an altered mind concerning radical measures and a faded courage, but a steady determination fully expressed to have nothing more to do with me.

I never saw him again until a year or more afterward, when he fell under my care as a heritage from my colleague who preceded me in service in the medical wards of the Western Pennsylvania Hospital.

The man was then a convalescent from another ailment, and I obtained a history of his case after the operation to which I have in the foregoing lines referred. He told me that he bled from the naris more or less for ten days after the cutting, when gradually good breathing-capacity supervened in that nostril and it continued in this free and open condition, even when he suffered otherwise with cold in the head An examination was now permitted by the patient, and I found the right naris, upon which I had made the frustrated attempt at abcision, to be in a normal condition, revealing no scar or other evidence that it had ever been other than normal. Its fellow was, however, in its old condition of stenosis

To me, there was a valuable lesson in this case, which I determined to turn to an account, and to this end I persuaded the man to allow me to use similar means, of a milder nature, in the other naris. This was at last consented to, and at intervals of a few days small and deep punctures were resorted to, with a knife similar to that used for incising the cornea in the extraction of cataract. I abstracted from one-half to three ounces of blood at a sitting; and in a few weeks we were rewarded with a reduction of the tissues and an entire freedom in nasal breathing, and a cure of a permanent character.

Since then I have practised incisions and punctures in every case in which there was a contra-indication to the more radical measures which we ordinarily use. The latter cases are numerous, embracing those in which the galvano-cautery is objected to, and in which the small saw and scissors or snare are repugnant to the mind of the patient who is suffering from one of the various intra-nasal deformities resulting from or concomitant with the different stages of inflammation and hyperplasia so commonly seen connected with catarrhal diseases of the naso-pharynx. There is a class of cases, an example of which is seen in the following taken from my case-books, in which this mild measure is especially appropriate and efficacious.

Miss S. M., of Pittsburgh, referred to me by one of our New York colleagues, with catarrhal disease of the naso-pharynx. She was the only remaining child of wealthy parents, who had lost a number of grown children, and were consequently not only nervous and timid about any measure that appeared at all severe, but the lady herself was a very frail person, and subject under the slightest cause to serious fainting spells, that confined her to bed and left her heart's action weak for days at a time.

The chief but not the only cause of her naso-pharyngo-laryngeal catarrh was an extensively thickened septum, from chondritis. Upon its plane, in the left naris, the adventitious tissue filled the cavity to stenosis. The saw was forbidden, even to be mentioned, or any other of the severer measures of like nature, and only the milder incisions with the knife were resorted to surreptitiously, until the sight of blood following my examination became a thing usually looked for, and it was attended with constantly increasing benefit. I finally showed her that the innocent-looking handle, on the end of which was wrapped a piece of cotton, that I used ostensibly to cleanse the surfaces, really concealed the blade of a small knife, with which I made as many punctures deep down into the inflamed tissues as I could at each sitting, without exciting suspicion on the patient's part or producing any mental impression that would

bring on fainting. These incisions were at length known to the patient and agreed to, and the gradual but sure result was a reduction of the hyperplasia upon the septum narium, curing the concomitant catarrhal disease in the pharynx and larynx; but most of all to be noticed was the improvement in the general health of the patient.

This, gentlemen, is a type of case and the style of treatment of which I could give you a very long and somewhat varying list from my case-books; and now, after several years' experience, with this milder form of surgical measure, I bring the simple plan to your notice, believing that, even if many of you have already used it, it will not be altogether amiss for me to attest its value in this brief recital of actual experience.

THE PREVENTION OF CONCEPTION.

BY ISAAC PEIRCE, M.D.,
TAZEWELL, VA.

There are questions which perhaps it is better for men never to discuss, questions the discussion of which will teach nothing and which should be weighed by the individual conscience and decided within the secret workings of the individual mind. But since such a journal as the REPORTER has opened the question of preventing conception, we can but believe that good will follow its discussion, and thinking men should enter the argument with minds unbiased with what has heretofore been regarded as the moral or religious aspect of the question. Moreover, if we enter this subject at all, we should do so with perfect candor, calling a spade a spade, trying to further the good of our science, and not seeking for something about which to multiply words, never reaching a conclusion. The appearance in the REPORTER of any communication on a subject so fraught with interest to physician and patient alike, invests it in the natural order of things with much weight; therefore those who undertake such communications should see that they have considered their subject well before expressing decided opinions.

At the date when I write, there has appeared but one paper on the subject since the Editorial which prompted it—that of Dr. Blackwood, who enters directly into the argument of the question and deals out facts and opinions with a fearless hand. His courage and candor deserve admiration; but I think he is too hasty in some of his conclusions and in some respects misses the spirit of the discussion, as well as the end to be accomplished. As I see it, the question suggested by the Editor was not how to prevent criminal abortion, but conception. Every man knows the horrors of illicit love and the suffering of misguided though patient and confiding women; no man is insensible to the lifelong shame of a child thrown upon the world without knowing a father; and no man denies the wickedness of criminal abortion. No medical man doubts the suffering, and in many cases permanent injury, of the woman who practises abortion that she may escape the shame of her own wickedness, sinning doubly that she may shield herself and her destroyer from the condemnation of the world. No, it takes no one to tell us this; we all know it too well; the poor creatures come to us almost every day, broken down in health, asking for treatment, asking that their secret be protected, and are willing to undergo anything to relieve their physical suffering and escape the consequences of their error. There are others known to us who are in a worse condition, those who yield to the seducer's embrace, bear their children, and, losing all respect for self, plunge into the depths of misery and disease, becoming of those to whom Mr. Leckey thus alludes in his History of Morals in Europe: "That unhappy being whose very name is a shame to speak, who counterfeits, with a cold heart, the transports of affection; scorned and insulted as the vilest of her sex, and doomed, for the most part, to abject wretchedness and an early grave, she is in every age the perpetual symbol of the degeneration and sinfulness of man; she remains while creeds and civilizations rise and fall, the eternal priestess of humanity blasted for the sins of the people."

Now, knowing the state of things as the members of the medical profession do, and having exerted every effort toward a remedy, is there a possibility of bettering these conditions by preventing conception, as Dr. Blackwood intimates? I say No! I think it can be made plain to every man that we would but bring about a worse state of affairs, if it is possible to imagine anything worse. It is true we may prevent criminal abortion, we may lessen suffering, pauperism, and neglect among children the issue of illicit love; but we do more, and we should look at this side of the question. Is it the woman, who in the hour of her fall thinks of conception? Does a preventive suggest itself to her? Does she dream that this act will

crown the love and trust she has given her seducer before the hour of its perpetration? Or is it the man, who, knowing his vows of love and marriage to be false, plans her fall and studies the question of a preventive? In eight cases out of ten, I think it is the man; and, with a sure preventive in his hands, how much stronger will be his argument, how much oftener will his persuasion meet compliance, and we all know how the falsity of his promise of marriage will increase. In the other two cases, it will require no offer of marriage, no vows of love; the desire and the preventive will be all that is required to carry them from the arms of one lover to those of another.

If Dr. Blackwod is right in teaching that a man is not culpable before the laws of God and man who interferes to prevent gestation *before* conception has occurred, as I see it, he will institute a new moral law which will be entirely different from that taught by any period of the world's history. He would make adultery a matter of no consequence so long as conception is prevented with its attendant ills. I think I am just in this view, as I think I have ground for my fear when I shudder at what would be the result of the promiscuous prevention of conception, even with the idea of stopping criminal abortion, pauperism, and suffering of illegitimate children. I believe that if we put into the hands of men a ready and sure means of preventing conception, there will be more prostitutes, fewer marriages, and more disease among women. Syphilis, gonorrhœa, and chancroid will be the next in order requiring a preventive.

I think this is the idea which has kept the question in the dark so long, and not the fear of how moralists and church people would receive it. It has been the fear of instituting a process which we could never hope to control, and which would in a short time become so universal and popular as to admit of no check, that has made cowards of the medical profession. I think we have been cowards heretofore, and the REPORTER will deserve much credit if this discussion should determine for us clearly the questions: Should we ever prevent conception? and, if so, when should we interfere? What is a ready and sure means of effecting the object? and how shall we keep the matter in our own hands? No physician should give a preventive to be used outside of the married state, any more than he should produce abortion for the sake of shielding either mother or father. And if we confine ourselves to married life, a vast number of men, both in and out of our profession, will take the ground that, child-bearing being the natural consequence of matrimony, it would always be wrong to interfere; that a woman who incurs the risk of pregnancy and childbirth should bear it as best she may, never crying out, no matter how great her suffering, always allowing her husband his "rights"; and if she fill a premature grave they would consider it a sad fate, but a fate from which there is no escape. Then, a large number of women who have safely passed their menopause are prepared to laugh at the suffering of their younger sisters, and would look upon any interference as criminal. The younger ones would show a majority on the other side, and some, as in Dr. Blackwood's case, will cry out that suicide is preferable to another pregnancy and delivery.

Assuming that there are cases—and I think few men in the medical profession will not admit that there are cases—where the prevention of conception would restore the happiness of a family, give peace to the wife, turn the husband again to the path of virtue, and prevent the life-long suffering of offspring; then the question arises, what are these cases? Dr. Blackwood is right in claiming that there is no justice in condemning children to an inheritance of syphilis, scrofula, tuberculosis, epilepsy, or imbecility, and he might have added a host of others. Where this is to be avoided, I agree with him that prevention is *imperatively demanded*. Again, women who are deformed, women whose lives are made one constant and heavy burden by pregnancy so often repeated that they seem never to have an end, women who are made miserable by the so-called "habit" of abortion, and women whose former gestation and delivery have brought them almost to the door of eternity and who are now in constant dread lest another such ordeal will complete the work and leave a motherless child or children—yes, all these women who are crying out to us from the depths of their fear and misery for help should be heard and their prayers answered. There is no other way. Men *will not* abstain from sexual intercourse, though they see their trusting wives gradually slipping from them, and if here and there one is found who yields to the entreaties of his wife to spare her from a horrible death and a premature grave, he will most often be one who is damning his own soul, ruining his life, and saving the woman from one evil only to render her more unhappy by gratifying his lust among harlots.

Recognizing the fact that there are cases in which prevention is a necessity, and that our duty is to work a reform that will prevent much of the physical suffering and mental distress among women, I am at a loss to know what are the means best suited to accomplish this and how to apply them. The number of preventive measures which have been proposed is not small, but the selection of one which we can control and its restriction to those alone who really need it are not easy. Let it become generally known that the medical profession countenances a preventive even in a few cases, and there is reason to fear this will be stretched to a license which will work much mischief to women who are already experimenting in this direction, who have no reason why they should not fulfill the God-given function which makes happy homes, and who are now only held in check by the judgment of the world. Will it not also place in the hands of men a ready argument with which to destroy the purity of loving, trusting girls? As I see it, this is the reason why to the deserving as well as the undeserving we have for so long given the old woman's advice, "to take a glass of cold water before going to bed and *nothing else*." This is the reason why we have allowed women to lead lives of misery and seemed not to heed their cries for relief. Thoroughly awake to the fact that the prevention of conception is sometimes right, that it is sometimes a plain duty, it is to be hoped that we may yet find some means whereby we can overcome the difficulty of the problem and confer a blessing on those who will appreciate it most.

A CROP OF BOILS.

BY WILLIAM M. CAPP, M.D.,
PHILADELPHIA.

Quite a number of articles have recently appeared in the medical journals concerning furuncle. Each writer had his favorite "sure cure," and one might feel that there was cause to reproach himself as blameworthy if he did not at once abort, cure, prevent recurrence and avoid a "crop of boils" in any case of the kind which should present itself. Lately an opportunity offered itself to me to try some of the remedies advised. A patient about seventeen years old came for treatment for an unmistakable boil upon the thigh—large, inflamed, swollen and painful. The general health was good and at first only local applications were resorted to. Mindful of the theory that succeeding boils come from external inoculation from a previous one, the greatest cleanliness was observed and boracic acid disinfection was used. A liberal application of a salve composed of salicylic acid rubbed up in simple cerate was made at bedtime, and though it caused smarting at first, afterward it was soothing, and a good night's sleep was obtained. In the morning there was a large accumulation of matter, which was removed without much pain; but the skin in many places around, where it had been covered by the salve, was blistered as thoroughly as if cantharides had been used. The hardness was all gone, there was relief from pain and very soon there were the appearances of a healthy sore which healed satisfactorily. But a few days later as many as nine other points of pain and induration were noticed, all within a radius of five inches from the site of the first boil. The same application but with a smaller proportion of acid, and with cosmoline substituted for the cerate, was used. The boils all quickly suppurated with very little pain. Most of them were superficial; two only were at all large and none of them were as formidable as the original boil. They were thoroughly cleansed by a solution of bi-borate of soda and dressed with cosmoline of neutral reaction, having boracic acid rubbed into it in about the proportion of twenty grains to the ounce. Some cosmoline has an acid reaction, and hence is irritating and for such applications is better avoided. This treatment proved soothing, at once allaying the itching and soreness, and a rapid healing followed with no further irruption in that locality.

A few days later several inflamed pimples appeared on the face and the general health appearing a little depressed, an iron tonic was administered and also sulphide of calcium, four times daily in a dose of three-quarters of a grain, which was gradually increased to a grain and a half. One of the pimples becoming large and painful, another of the remedies recommended as infallible was tried upon it, viz.:—tannin made into a paste with tincture of arnica and gum acacia, painted thoroughly over and around the affected spot. It certainly was soothing, but otherwise worthless, unless indeed it may have hastened suppuration; for, the next morning the boil discharged copiously.

By this time several angry lumps were developing, with much pain, on the cheeks and one on the chin. As there were still other treatments recommended as never

failing to abort a forming boil, it was thought desirable to try some of them. The chin was freely and frequently bathed with a solution of salicylic acid—the part kept moist with it. It was soothing, but the boil suppurated at three points, with probably less swelling and pain however, than otherwise might have been expected. A strong solution of boracic acid in alcohol, which was much praised by a recent writer, was tried upon another forming boil, with quite similar effect.

The two upon the cheek which threatened to be very troublesome were treated according to the recommendation of still another writer. They were painted freely for three days with the semi-fluid extract of belladonna, at the end of which time they had nearly disappeared without suppuration and were practically well. The application from the first was soothing and the result satisfactory.

In addition to the treatment narrated the patient took at the solicitation of friends as a vaunted household remedy for boils, some porter—a wineglassful four times daily for three or four days. After about four weeks from the appearance of the first boil, there were no further manifestations and the malady seemed passed.

It is in order now to decide if any of the remedies had any effect whatever upon the disease except to mitigate the pain at the time. The writer feels that in treating another case of furuncle, unless meanwhile a better course should commend itself, he would rely upon calcium sulphide internally and belladonna externally, and would hope for like good results.

Since writing as above, an acquaintance relates that quite recently in treating a case essentially similar, the medication used was the fluid extract of burdock internally, with equally good results. This remedy then, in his estimation, is also to be added to the list of "sure cures."

—Prof. Heinrich von Bamberger, of Vienna, Austria, is dead.

—The *Northwestern Lancet*, Nov. 1, 1888, says that the mortality from fever among the workmen on the Panama canal has been greatly reduced by the establishment of proper hospitals for the care of the sick, and a convalescent home on one of the islands in Panama Bay. It is said that as the result of these measures workmen no longer stand in dread of the fever, and are flocking to the work in immense numbers.

Society Reports.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, November 1, 1888.

The President, A. Jacobi, M.D., in the chair.

Dr. J. Lewis Smith read a paper on

Sudden Heart-Failure in Diphtheria.

Physicians of experience, he said, commonly meet with cases of diphtheria which seem to be progressing favorably; the medical attendant and the relatives of the patient feel cheerful at the bright prospect of recovery, when suddenly the scene changes, symptoms of dangerous heart-failure appear and usually result fatally. In the more favorable cases active stimulation may cause the patient to rally, and perhaps to recover; but often another attack occurs and ends in death. The most complete clinical history of sudden heart-failure in diphtheria has been given by Cadet De Gassicourt. In some cases the symptoms develop more gradually. In the first class the patient's pulse is likely at first to be slow, then becomes rapid, the respiration superficial, the surface pallid, perhaps slightly cyanotic, the patient utters cries of agony, and soon dies. or perhaps rallies under stimulants, but succumbs to a subsequent attack. In the second class of cases death is less sudden; there is no agonizing cry or moaning at the last moments. Some, perhaps the majority of patients, manifest disturbance of the stomach, epigastric pain, vomiting, dyspnœa, rapid respiration and heart-beat. De Gassicourt has recorded but one recovery in fourteen cases A careful microscopical examination has been made in three cases, including an examination of the pneumogastric nerve and myocardium, which were normal in one case; in all three the medulla oblongata was apparently normal, but the gray matter of the cord which had no immediate connection with the affected heart contained degenerative changes. Sudden loss of power in the heart has been attributed to several causes; for instance, to changes in the muscle of the heart; to thrombosis or antemortem clots in the heart; to disease of the central organ of innervation, the medulla oblongata; to deficient conducting power in the pneumogastric; to the influence of ptomaines.

Recent observations have not borne out the view that endocarditis is the cause of the

cardiac failure; its existence has not been proved. A more probable theory of the cause is that granulo-fatty degeneration occurs, a change which is present in some cases, but can account for only a few.

Cardiac thrombosis has been regarded as a cause by Beverley Robinson and by French writers, but it has since been shown that the clots are identical in appearance and kind with those found after death from other diseases; they occur during the death-struggle and are secondary to heart-failure. The theory of deficient innervation is most applicable to the majority of cases. On this theory also one can account for vomiting, epigastric pain, and interference with respiration—the lungs, heart, and stomach being supplied by the same nerve, the pneumogastric.

The facts, Dr. Smith thinks, justify the view that there is a cardiac paralysis. What is true regarding the nature and cause of palatal and multiple paralysis is probably true of cardiac paralysis. He advanced objections to the view that the cardiac failure is due to peripheral neuritis; when the neuritis exists it need not be the sole cause. As to disease of the central organ of innervation, he said it has not been demonstrated. The mutability of the paralysis, its disappearance and reappearance in the same muscles, conflict with these views of its origin.

A theory regarding the etiology of diphtheria and its symptoms which is rapidly gaining ground is, that the specific germ acts locally, and that the systemic infection takes place through ptomaines the product of such germs. Treatment must be prompt and with active remedies. The patient should be kept quiet in bed, the head low. Alcoholic stimulants should be administered, and concentrated and peptonized food be employed; hypodermic injections of brandy should be given during the sudden seizure. Other useful agents are: ammonia, camphor, musk, the electrical current. Subsequently, remedies employed in diphtheritic paralysis of other forms may be used. Some have spoken very favorably of strychnia.

The PRESIDENT thought the paper suggested the following points for discussion: Is heart-failure occurring early in diphtheria of the same nature as that occurring late? Are the cases with a slow pulse identical with those with a rapid pulse? Are the cases following general paralysis the same as those preceding it?

DR. A. L. LOOMIS said he had made a post-mortem examination in but one case of diphtheria with death from heart-failure. The right cavity of the heart was much dilated, its walls flabby and granulo-fatty. He had supposed that sudden heart-failure in diphtheria did not always depend on the same cause. His impression is that in the acute stage of the disease it results from the diphtheritic poison, whatever that may be, just as heart-failure sometimes occurs from the poison of typhus fever In other cases he said he had rather yielded to the opinion that it is due to a peripheral neuritis.

DR. CAILLÉ said he had formerly advised patients with mild diphtheria to be out some, and take light exercise in the fresh air, but one patient having had heart-failure under such circumstances he now always advises the patients to remain in bed. One of his patients brought on heart-failure and death by taking some indigestible food. He advises in all cases of diphtheria, rest in bed, proper food, and stimulation.

DR. BEVERLEY ROBINSON referred to his investigations regarding diphtheria while he was in Paris a number of years ago, when he made many post-mortem examinations and found heart-clot of a nature to convince him that it was antemortem and the cause of death. He has not had reason to change the view then formed. He raised the question if the common free employment of tincture of the chloride of iron may not be a cause of such ante-mortem heart-clot.

DR. FRUITKNIGHT leaned toward the view that ptomaines, the product of microbes on the surface, are the toxæmic agent and cause of heart-failure in diphtheria.

DR. SEIBERT said he would differentiate between heart-failure from the effects of the diphtheritic poison on the central nervous system in the acute stage of the disease, and that occurring later and usually in gangrenous diphtheria.

Dr. Dessau made some remarks, and Dr. Loomis combated the view of Dr. Robinson as to heart-clot causing death. He expressed the belief that such clots develop during the death-struggle which is caused by heart-failure.

The PRESIDENT mentioned anæmia of the brain as one cause of sudden death in diphtheria, as it is in other diseases which leave the patient in a weak state. He also said that in some cases the heart-failure may have received the credit of causing death when really paralysis of the respiratory muscles has been the occasion of it. He suggested the freer use of alcoholic stimulants in diphtheria; he thinks there is little likelihood of their too free administration.

Dr. Smith, in closing the discussion, suggested that cases in which the patient, almost moribund from heart-failure, is rallied for several hours or a day before having another attack followed by death, are against the theory of heart-clot, as, indeed, are cases of multiple paralysis.

Reports of Clinics.

BELLEVUE HOSPITAL.

MEDICAL CLINIC—PROF. LOOMIS.

Gout.

Case I.—The patient was a man, 42 years old, a barkeeper by occupation, and a well-nourished and healthy-looking man. He was brought before the class with the history of having been acutely sick for four days. In speaking of his history to the class, Dr. Delafield said that he gives no family history of gout. He has always been a drinking man, indulging in all sorts of drinks, averaging twelve to fifteen a day. He has been also a hearty eater, eating rich and nutritious foods. For many years he has not taken any active exercise, none at all out of doors. His first attack came on about fourteen years ago. In previous good health, he awoke one morning to find the great toe red, swollen, and very painful. These symptoms increased for the first few days, the pain being most severe at night; and then these signs subsided, leaving him perfectly well. The duration of the attack was about one week. He remained in good health for about one year, when he was again suddenly seized with an illness similar to the one just described. The same joint was affected: the acute signs lasted, as before, four or five days, but the toe remained stiff and tender, and he could not go about well for nearly two months. After this, the attacks increased in frequency; other joints became affected—the fingers, elbows, knees, shoulders and hips; and, during the interval between the acute exacerbations, he was never entirely free from stiffness and soreness in certain locations. At the present time, there is a typical swelling at the knuckle of the index finger of the right hand, and also at the joints of both big toes.

This, then, is a characteristic case of gout. The one exceptional feature it presents is the fact that there is no history of hereditary taint. Gout is a disease that is almost always hereditary, and further, that usually requires more than one generation for its development. A gouty parent is certain to give the gouty diathesis to his children. But in this patient there is no such history, and we look to the fact that he has been almost all his life in-doors, eating largely and drinking largely—especially of wines and ales—to find the cause of his disease. A man cannot develop gout in one generation on wine alone: it can occur only in those who eat more than they can assimilate, and at the same time do not take sufficient exercise.

Dr. Loomis asserted that one-third of those listening to him at the Clinic ate more than they could assimilate, and, as in the patient, this excess is taken up by the blood. In the present case, uric acid is generated, and in the joints urate of soda deposited, and this must occur unless exercise uses up this excess from the food. Dr. Loomis does not believe in the existence of rheumatic gout; the disease is either the one or the other, rheumatism or gout. A patient may have an attack of rheumatism, and later on he may also have gout, but there is no combination of the two diseases.

Gout, as it becomes chronic, in all cases, as in this one, makes its victim a cripple. In an acute attack, the first change in a joint is the deposit of urate of soda on the fringes and edges of the cartilage; accompanying this there is hyperemia, etc. At first, these deposits are removed after the attacks, but later on they remain and thus incapacitate the joint. Similar deposits may occur all over the body, and may be seen in the joints, skin, ear, eyelids and elsewhere. The present case he believes to be the earliest in regard to development he has seen in non-hereditary gout. Where this tendency is strong he has seen the disease manifest itself in children of five and six years of age. In this patient it began, as it always does, in the big toe. As is almost always the case, this patient has refused to give up his mode of living. He loves his table and he seasons his food highly. The gouty subject is a *bon vivant*, and it is always a pleasure to dine with him. In this lies the difficulty of weaning these people from this active cause, over-feeding. In the treatment of these cases little can be expected from local applications; but the limb should be well elevated, and colchicum should be given. It is to this drug that entire treatment is trusted. It will not cure gout, but it will relieve an attack, and that is all. It makes these chronic cases worse. These sufferers pin their trust to some one preparation and

carry it about with them, to be taken on the first appearance of an attack. In this way an attack can be often warded off. There are Laville's Liquid, Blair's pills, White's pills, and a host of other remedies, among which is the one that this patient has had faith in, namely, Loomis's Acetic Extract of Colchicum.

Dr. Loomis long ago found out that there is but one preparation of colchicum which is of very much value in acute gout, and that is the acetate of colchicum. Laville's Liquid used to be employed in England and elsewhere for years in preference to every other drug in these cases. None relieved so rapidly and completely. This was due to its containing, as the chief ingredient, this acetic extract of colchicum. This drug will certainly relieve, if carried far enough—it should purge sharply two or three times—in this manner the capillaries of the portal circulation are unloaded. To assist in this effect other drugs can be added. Loomis's preparation before mentioned contains also aloes, ipecac, and calomel. Dr. Loomis suggested the following gout pill:

℞ Ext colchici acetici,
Ext aloë,
Pulv. ipecac.,
Hydrarg. chlor. mit. . . . . āā gr. i
Ext. nucis vom. . . . . gr. ¼ ad ½
M Sig. Ft. pil. No. I. To be taken every four hours, until it purges.

These pills may be carried about and employed at the first sign of an attack: they will often abort it.

After the attack is over, the real treatment begins. Medicines are now of no avail. Iron does harm. Cod liver oil is not usually well borne.

Our dependence is on diet and exercise. On the question of diet the profession is divided. One-half say, Give the starches and no meats; the others, No starches, but green vegetables and meat. Dr. Loomis believes it makes but little difference, and employs in his own cases a mixed diet; but it must be very sparing, attention being directed to the thorough assimilation of all that is eaten. To achieve this purpose the patient must be half starved: he should always rise from the table hungry. His wines and his high living should be stopped. If for any reason stimulants should be required, spirits is the best form to use. Active exercise in the open air is also of vital importance. He would advise this patient on his recovery to become a cow-boy.

Having occupied so much time on this first case, there remained but sufficient to present the second and note the chief distinguishing features between the two.

Rheumatism.

Case II.—The patient was a man, 35 years old, a worker in a gas-house, where he is exposed to sudden variations of temperature. This patient was attacked suddenly several days ago: his right hand is now much puffed up and red, his left wrist is also affected, and there is some pain and swelling in the right shoulder. He gives no family history of rheumatism. He is a moderate drinker, and this is his first attack.

Briefly, the differences between this case and the preceding one are these, and they are characteristic: Rheumatism never begins in the smaller joints, and in one attack joint after joint will become affected. The reverse is true of gout: it begins in the smaller joints, and does not pass from one joint into another. Rheumatism is liable to give acute endo- and peri-carditis. Gout is not likely to, but it may develop slowly an interstitial inflammation of the peri- and endo-cardium.

The subject of rheumatism has been under the influence of damp and wet, or as in this patient, of sudden variations in temperature: the gouty subject gives a long history of no exercise and hearty feeding. And it is just here in the etiology that is found the greatest difference between the two diseases. A person of this patient's age will probably have some cardiac complication before his attack is through. On examination, a murmur was discovered with the first sound of the heart.

These cases of endocarditis usually leave a crippled heart behind them.

—The *Quarterly Journal of Inebriety*, October, 1888, says that the Count de Villeneuve was tried at Hyeres, France, for selling wines adulterated with arsenic. It seems several persons, noted wine drinkers, had died, having many symptoms of arsenical poisoning, and others were made very ill. The wine used was found to be heavily charged with arsenic to hold it from change, and was the direct cause of the death and illness. The trial was for damages by the friends of the victims, but the prosecution failed. The judge condemned the process of wine adulteration and the case ended. A curious sequel to this event followed in September last, when the Count de Villeneuve gave thirty thousand francs indemnity, and two plantations, to over two hundred of the sufferers who had drunk this wine.

Special Correspondence.

JOTTINGS FROM AROUND THE WORLD.

The University of Melbourne.—Examination Questions.—Boarding Houses for Students. Visit to a Lecture-Room.—Law Against Immoral Literature among the Fiji Islanders.

Melbourne, Sept. 10, 1888.

My travels have been so extended, since beginning the "Jottings from the Occident," that I feel compelled by longitudinal reasons to change my title; and as I propose to complete the tour of the world, *via* Indian Ocean, Red Sea, England, New York, and finally San Francisco by the way of the Isthmus of Panama, it will be more appropriate to name these papers as above. I trust I can jot down such medical items as, gathered by a physician in his wanderings, will be of interest to many. It has been gratifying to me, and also shows the wide circulation of the Reporter, that a number of letters have reached me from doctors all over the country asking fuller particulars of some points touched upon, especially in regard to California. It will give me pleasure to answer any questions.

Australia is no longer in the occident; the English include this country in the orient; but it is the dividing line between the occident and the orient—Honolulu is in the far occident to them, and Melbourne in the far orient.

University matters in Melbourne are of sufficient peculiarity and interest to make this letter deal almost entirely with them. There is a flourishing medical school in this city, a department of the University of Melbourne. The corner stone of the University was laid in 1854; the medical department was formed in 1862. The grade of study is a high one; since 1872 no student can obtain credit for any portion of the medical course unless he first has passed an examination in Greek, Latin, English, arithmetic, algebra and geometry. The course continues five years, and the student must pass five examinations during this time; then, if successful, he obtains the degree of Bachelor of Medicine or of Surgery, as the case may be. The examinations are both written and oral. A graduate from any recognized school of medicine may obtain the University degree after passing the fifth-year examination. Candidates for the degree of Doctor of Medicine or of Master of Surgery must be Bachelors of Medicine or of Surgery of at least two years' standing in the University of Melbourne or in some other University recognized by it. I wish that space would admit of making an extended list of questions asked at the fifth-year examination. I shall give simply a specimen in each department: "What are the effects on a pigeon of removing the whole of the cerebral cortex?" "Give the minute anatomy of the œsophagus." "Describe the macroscopic and microscopic changes which occur in acute bronchitis." "Write a commentary on adenomata." "Describe all the structures that bind together the bodies of the vertebræ from the axis to the sacrum." "Describe the steps of the dissection necessary to expose the inferior dental nerve." "Compare the hearts of a frog, a fish, and a mammal, and make a sketch of each." "Dissect the nervous system of a crayfish." "How may aldehyde be prepared?" "What are the different forms of cannabis Indica?" "Discuss the dietary of acute febrile disease." "Enumerate all the appearances of drowning, twenty-four hours after death." "What are the diseases that may produce cavities in the lungs?" These questions are for what are called the ordinary examinations; if any student enters for an honor examination, a separate set of questions is used and is correspondingly more difficult.

A word as to the building itself. Both the University building and the medical hall are unattractive—rather musty, ivy-grown affairs that would look all right in England, but are not quite up to our modern ideas in newer countries. The grounds are, however, very large and very pretty, being adorned with flowers, trees of all kinds, and an artificial lake

The professors can neither sit in Parliament, nor become members of any political association, nor can they give private instruction, nor receive any persons, whether students or otherwise, as boarders in their houses. A curious feature is the license required to be obtained by all who desire to keep a boarding house for students. Those desiring to obtain a license must make an application in writing, accompanied by the certificates of two or more resident householders in Melbourne (one of whom must be a member of the Senate of the University, or a justice of the peace) as to the character of the applicant. On the receipt of such an application the Registrar inspects the house of the applicant, and reports to the

Chancellor as to the situation and neighborhood, the accommodation, the state of repair, and the general fitness of the house for the purpose, and any other remarks he may consider for the interest of the University. Upon the payment of one pound the successful boarding house is granted a license for one year. Any breach of conduct on the part of this house will result in a revoking of the license or a refusal to renew it. How many of our poor boys in Philadelphia would like a plan like this. I think many fewer "*mysteries*" would be served up at dinner. And what glorious fun to hint, in the most dignified tone of voice, that an immediate change must take place in the *menu* or "we shall tell on you." And still more, as I am writing this, my doctor-friend beside me says, the house thus under the ban of the college is published in the most prominent paper of the city.

I had the pleasure, a few days ago, of taking luncheon with the Dean of the Medical faculty, Prof. H. B. Allen, and of hearing two of his lectures on anatomy and pathology. The Doctor's life has been a University one; first as student and graduate, then as lecturer, demonstrator, professor and dean. He is only about 40 years of age, but the present status of the medical department is largely due to his faithfulness to its interests. The salary of the professors amounts to about five thousand dollars, and a house free. A new house has been completed for Dr. Allen in the grounds and next to the school. The money for all University purposes is voted by the Victorian Parliament; only a few private bequests at present have been received. The Professor says that while there is no direct law against private practice, they find that accepting a chair is equivalent to retirement from practice; the duties are so many and so continuous, by reason of the graded courses, that it is impossible to do anything but University work. A Chair is not the stepping-stone to practice here; quite the reverse. The position is made to compensate for this in two ways; first, by making the position a sure one—a professor can be removed only on the showing of gross misconduct, and he can demand reasons of removal, even before the Supreme Court if he deem it best; and, in the second place, after fifteen years' service a very handsome extra is added to his salary, on the ground that by this time his services in practice would be yielding a larger income.

A few minutes before the Professor arrived I entered the arena of the lecture room in company with Dr. Gillam, a recent graduate of the University of Pennsylvania, who is out here in charge of a patient of Dr. S. Weir Mitchell. We found that medical students are the same the world over, as we were received with most hearty applause, on the simple basis of anything for a noise and a racket. But on the entry of the Professor, instantly the most profound quietness prevailed, making a strong contrast to some of our similar occasions at home, where the unbounded delight of the professor seems to be to hear the greatest commotion on his appearance. There was a dignity and respect in this instant hush that impressed us.

In front of each seat is a table for note taking, which is insisted upon. The lecture was on the anatomy of the spinal cord, and was most excellent, showing that the lecturer was a true teacher; self was entirely hidden and the sole effort was to make clear the subject in hand. There was not the slightest hint of personality, all was for the one object—teaching. After the hour was over the Professor retired for a few moments, during which time an advanced class had assembled in the same room to hear the lecture on Pathology, the subject being heart diseases. In this lecture the doctor spoke very slowly, and waited for each word to be taken down. At the close of each lecture the roll was called and absentees marked; an average attendance of eighty-five per cent. being required. After the close, I took the opportunity of making a further interview, and learned the additional facts that the average number of graduates is twenty-five a year, usual attendance one hundred and fifty; no native Australian has ever taken the degree; the clinical service is not in a satisfactory condition; no clinics are held in the University grounds, the students attending the Melbourne hospital. In this line Prof. Allen is striving to make some reforms and advances. While a foreigner must be impressed with the thorough and exacting theoretical courses, he can readily see that our country is far ahead in clinical teaching. The clinic room is scarcely ever the preparatory process for higher professional position, therefore it is not so eagerly sought after. The diplomas of only such colleges as have a positive three-year graded course are recognized here; it is not sufficient to show that the applicant has studied medicine for three years. A case in point has just been before the Registration Board. An American claimed the right to practise on account of having taken an extra year a few years after his regular two-year

course in one of our best colleges; his claim was rejected.

There is no chair of Sanitary Science as yet in the University, but steps are being taken now to create such a one, and the Government has indicated its willingness to furnish the money. The Government is very liberal to its University; Prof. Allen says that he received word a short time ago that, the budget being in a satisfactory condition, they would like to know how much money he wanted for the next ten years for the University; he named a goodly and increased sum over the usual amount, and it was at once voted.

The great Centennial Exhibition which is going on here now, while of the grandest proportions and showing the rapid growth of a most wonderful country, is not of sufficient medical interest to cause any special remark on my part in a medical journal. There is nothing on exhibition that is specially new in our line; in the American Court the medical display consists of several notorious patent medicines, and throughout there is a dearth of any worthy medical exhibit. For reasons given in a former letter this would have been a favorable opportunity to show these people anything of a sanitary character—systems of drainage, etc., etc.

Fiji islanders and skull soup seem to be closely associated in one's mind, the readings of school days having fixed the cannibalistic tendencies of these people in the memory. What will you think when I tell you that, quite recently, the authorities of these islands confiscated some of Naphey's books, as being literature calculated to spread immorality? I am personally acquainted with the man who tried to import them; he was arrested, his books taken out to sea beyond the coral reefs, and dumped into the ocean; he was saved from imprisonment only on the promise that he would never do such a thing again. Some of the poetry of this "goody goody" is taken away when we know that the very prosecutor in this case lives down the island with three or four black wives. One of the officials who obtained a glance at one of the books, with an imagination fired by the fuss made over the matter, determined to have one at any risk; he made known his want to my friend, who took his revenge on the Fijians as follows: he had one of the books unbound, and then had it rebound with the attractive title of "A Family Dictionary of the English Language"; it passed the customs as such in safety, and the official is happy.

PERISCOPE.

Angioma of the Forehead.

The *Revista de Ciencias Medicas*, of Havana, August 20, 1888, contains an account of a case of angioma of the forehead which was successfully treated by electrolysis. The patient, who was under the care of Dr. Raimundo Menocal, was a little girl 2 years old. The tumor, which was of the size of a large filbert, was smooth and soft; it was of violet color, and could be reduced by steady pressure. It had appeared soon after birth, and was growing gradually larger. Elastic compression had been tried without result. On August 6, Dr. Menocal applied electrolysis, introducing the needles in various parts of the tumor, but always with the points toward the centre of the mass. The application, which was continued for three minutes at a time, was repeated every three days. The tumor was somewhat diminished in size after the first sitting; at the fourth, eschars were observed about the negative pole, which were thrown off a few days later. This was followed by a little suppuration, but there was no hemorrhage. At the date of the report no trace of the tumor remained except a few tiny scars.—*British Medical Journal*, September 15, 1888.

Hysterical Neurosis of the Stomach.

J. Schlesinger (*Wiener med. Blätter*, No. 3, 1888) communicates the case of a young girl who suffered with disturbance of the stomach which was diagnosticated ulcer, although there was no hæmatemesis. She recovered completely under a milk treatment rigidly carried out. One year subsequently the patient was again taken sick, with violent pain in the stomach, loss of appetite, nausea, vomiting, and complete sleeplessness. No kind of food could be borne, and the largest doses of morphine, even when administered subcutaneously, had not the least effect. The diagnosis of ulcer of the stomach was then made. It was learned, however, that in the boarding-house in which this patient lived was a girl affected with hysterical neurosis of the larynx, and that in a short time two other young girls, including the patient, became similarly affected. A diagnosis of hysterical neurosis of the stomach was then made, the patient put upon bromide of sodium, and complete recovery soon occurred.—*Centralblatt f. d. med. Wissenschaften*, Sept. 1, 1888.

New Use for Bergeon's Method.

We learn from the *Wiener med. Presse*, August 26, 1888, says that Givre has recently communicated to the *Lyon Médical* a very interesting case which suggests a use for Bergeon's method of rectal insufflation of gas that may prove of more practical value than the one for which it has heretofore been used. It seems that a lad fourteen years old was attacked on May 23 with obstinate obstruction of the bowels, accompanied with vomiting of fæcal matter and colicky pain in the umbilical region. As the condition remained unchanged on May 28, the patient was brought to the hospital Hôtel Dieu, where his symptoms were found to be enormous meteorism, small pulse, superficial rapid breathing, temperature 101.3°, fæcal vomiting, violent colicky pain, and obstinate obstruction of the bowels. After copious irrigation, washing out of the stomach, and the constant current had been employed in vain, the rectal injection of gas according to Bergeon's method was tried. The tube was inserted into the rectum to the extent of fourteen or fifteen inches, and the gas injected under very high pressure. When the belly could be distended no further and the contour of the inflated coils of intestine was clearly visible, the patient was seized with violent pain and the tube was withdrawn. The patient had at once a desire to go to stool, and passed with a loud noise the enema of gas, and then from six to eight quarts of yellow, stinking fæcal masses. The patient has since been well.

Aneurisms of the Aorta.

In a communication to the Academy of Medicine of Paris, August 13, 1888 (*Gazette Hebdomadaire*, August 17, 1888), Germain Sée stated that he had had in his practice twenty-four patients with aneurism. He has noticed that these patients very often become tuberculous and die of a phthisis which is characterized by cavities and a progress that is slow and non-febrile. This fact seemed to him interesting from the point of view of the pathogeny of the disease in these patients.

In speaking of the action of the iodides in aneurism, M. Sée expressed the opinion that they have a definite action (1) upon the dyspnœa of secretory origin, by liquefying the product of the catarrh; (2) upon the intra-pulmonary circulatory troubles in hyperæmia of the lung, by checking venous stasis; (3) upon the size of the tumor, by contracting its walls and the tissues surrounding it. As a result of the diminution in size of the tumor, the pressure effects are relieved.

The Percussion Limits of the Stomach.

In a paper in the *St. Petersburger medicinische Wochenschrift* on the boundaries of the stomach and intestinal canal, by Dr. P. Jaschtschenko of Rostoff on the Don, the view of Traube and some other anatomists, that the stomach when empty falls back and does not lie in apposition with the abdominal or chest wall, is controverted; and so is his belief that the fuller the stomach is the lower its inferior border lies. According to Dr. Jaschtschenko's observations, the inferior border of the transverse colon extends as far downward as the umbilicus; the superior border, which is 2¼ inches higher, lies at a distance of 1½ inches below the sternum. When the gut is quite empty, the inferior border lies a little higher, or ⅓ inch above the umbilicus. In the right and left hypochondriac regions the superior border passes under the costal arch, being covered on the right side by the lower border of the thorax and the lower border of the liver, and on the left by the lower border of the thorax only. If the left half of the transverse colon and the upper part of the descending colon are full, the stomach being empty, a more or less dull percussion sound will be obtained over the lower part of the thorax on the left side, but above this there will be a tympanitic note up to the inferior border of the lung. If a part of the colon is empty, the stomach being full, a dull note will be obtained over the stomach, and a tympanitic note over the transverse and descending colon—that is, when the individual is in a standing or sitting posture. When he is lying on his back there will be a tympanitic note all over, with the exception of course of the region of the spleen. It is known that the superior border of the stomach lies against the lower border of the left lung, its inferior border coinciding with the transverse colon. This never changes its place, the filling of the stomach causing the dulness to extend from below upward, not from above downward, as Traube thought. Again, the stomach when empty does not collapse and fall back, for it is always under these circumstances distended with air. After death, in consequence of the loss of tone of the diaphragm, the abdominal organs rise somewhat above their position during life.—*Lancet*, August 18, 1888.

Temperature and Pulse During Menstruation.

In the Russian weekly *Vratch*, No. 35, 1888, Dr. Alexander V. Repreff, of St. Petersburg, writes that he has carefully examined the temperature and pulse before, during and after menstruation in 49 healthy and sick women, and that he has arrived at some important results of great interest both to the physiologist and to the practitioner. The outcome of Dr. Repreff's laborious observations (varying in duration from 11 to 42 days, with 4 measurements daily) may be briefly given as follows:

1. Healthy Women. There were 10 of these; 8 girls, from 15 to 27 years old; and 2 women, 41 and 23 years of age. Both the temperature and pulse during menstruation were found to fall below the average figures as observed in the same subject during the intermenstrual period. For a day, or several days immediately before and after menstruation, both the temperature and pulse manifest a rise above the intermenstrual average figures. This rise, however, never reaches a febrile height, which circumstance is said to be a characteristic feature of a normal condition of things. The said variations of the temperature are invariably strictly parallel with those of the pulse. The rectal varies with the axillary temperature, which constitutes another characteristic sign of the woman's local and general healthy state.

2. Sick Women. Of these there were 39. In women suffering with chronic uterine affections, the temperature and pulse during the catamenia rise above the individual normal level. In some cases, however, there are observed falls during the first and last day of the bleeding. In women suffering from oöphoritis and salpingitis, the temperature and pulse rise up to a febrile height immediately before and after, but oscillate about the normal level during menstruation. The rise is especially high in cases complicated with recent peritoneal inflammation. In women suffering with a mass of morbid processes simultaneously, the temperature and pulse present irregular oscillations. The parallelism between the thermic variations and those of the pulse is often absent in morbid cases. The same may be said in regard to the rectal and axillary temperature: sometimes, the axillary temperature and the pulse fall, while the rectal temperature rises. In a woman with amenorrhœa of three months' standing, there was observed, at regular intervals of four weeks, a rise of the pulse and the rectal and axillary temperature above the individual standard, which lasted on every occasion four days, and coincided with the appearance of lumbar pain, mucous discharge from the uterus and mucous diarrhœa.

3. The general conclusions are: 1. Menstrual variations of the temperature and pulse in healthy women are characterized by certain constant and typical features. 2. The latter disappear as soon as the woman falls ill. 3. Hence, under certain conditions, the menstrual temperature and pulse may serve as a diagnostic means for determining the state of the woman's sexual apparatus. The indications of the kind are especially valuable in cases of more or less latent sexual affections, such as a gonorrhœal disease of the internal sexual organs. 4. The behavior of the temperature and pulse in connection with menstruation gives an additional proof in favor of the view that the process is a general systemic one (and not local only), as Andrëëff, Rabutôt, Goodman, Mary Putnam-Jacobi, Stephenson, Carl Reinl, Hegar, etc., think and teach.

Vomiting of Pregnancy.

In connection with the case of a pregnant woman who suffered with uncontrollable vomiting, but who refused to have abortion induced, and died within twenty-five days, Jaffe, of Frankfort, makes some remarks upon hyperemesis gravidorum (*Volkmann's Sammlung klinischer Vorträge*, No. 305). He divides the vomiting of pregnancy into three classes. In the first, vomiting occurs only in the morning on an empty stomach; this is the most frequent form and the prognosis of it is good. In the second, which is not rare, vomiting occurs in the morning and also during the day after taking food, though only a part of the food is vomited. In this form the appetite is good, and the nutrition is not altered. With the occurrence of the movements of the fœtus the vomiting disappears. The third form, uncontrollable vomiting, is rare. It begins with the occurrence of conception, or first appears later. It is undecided whether it is more frequent in primiparæ or in multiparæ. The etiology is not known. If the affection is called a reflex neurosis, still this is only a definition that says nothing. The course of the disease exhibits three stages. In the first stage all nourishment is rejected; there is no fever, but thirst, pain in the epigastrium, salivation, and often constipation and anæmia, together with emaciation. In the second stage there is slight fever, the tongue is dry, and there is pain in the

epigastrium. The expired air is foul-smelling, the urine is concentrated and contains albumin and casts, which are the result of a nephritis produced by the inanition. The emaciation and the failure of strength increase. In the third stage high fever persists, delirium occurs, the patient sinks into a sleepy condition, and dies.

The diagnosis presents no difficulty. In the differential diagnosis diseases of the stomach and neuroses are to be considered. The prognosis is very uncertain; it is influenced both by the period in which the hyperemesis occurs, and by the life or death of the fœtus.

Treatment by diet and with medicines is generally ineffectual; the best agents are opium and the bromides. If local affections are present, a treatment directed to them is at times effective. If other measures fail, the pregnancy is to be interrupted—but not if the third stage has been entered upon, for in this case the patient is irretrievably lost.—*Wiener med. Presse*, September 9, 1888.

Action of Methylgreen in Checking Coagulation of the Blood.

In *Virchow's Archiv*, September, 1888, there is a paper by Professor A. Mosso, of Turin, on the employment of methylgreen for the recognition of the chemical reaction and of the death of cells. He finds that the methylgreen hinders coagulation of the blood. A solution of five-tenths per cent. methylgreen in a seventy-five hundredths per cent. salt solution retards coagulation of the blood considerably, even though only thirty minims of it are used to eleven fluid drachms of blood. If fifty or sixty minims of the solution just mentioned are added to eleven fluid drachms of blood, coagulation no longer occurs.

The leucocytes in blood that has been rendered uncoagulable by means of methylgreen are in their substance uncolored, while in their interior the so-called nuclei are stained emerald green. In some, the green substance is diffused throughout and fills the whole blood corpuscle; other leucocytes, on the contrary, are completely colorless, but the greatest part of the blood-corpuscles is violet, without a trace of so-called nuclei.

If eighty or ninety-five minims of a five-tenths per cent. solution of methylgreen are mixed with eleven fluid drachms of blood which has been drawn directly from the arteries, the methylgreen can easily be seen to be decomposed. Microscopic examination proves that the intensity of the coloration of the blood corpuscles and of the serum does not correspond with the quantity of methylgreen mixed with the blood, and that many leucocytes remain white. If acetic acid is now added to this blood, no matter in what proportion, and the blood is then diluted with water, the characteristic green color no longer persists. This shows that the disappearance of the green color can not be ascribed to the alkalinity of the blood. Prof. Mosso assumed that methylgreen in contact with blood is decolorized by an oxidation process; he then set to work to determine if the same phenomenon could not be brought about in some way by peroxide of hydrogen. The results obtained fully established his previous supposition.

The Fumes of Ether for Tinnitus Aurium.

In a paper read before the Cincinnati Academy of Medicine, September 10, 1888 (*Lancet-Clinic*, Sept. 29, 1888), Dr. J. E. Boylan reported a case of tinnitus aurium in which great improvement had followed the use of the fumes of sulphuric ether, which were insufflated through the Eustachian catheter. The patient was a man 40 years old, who had had chronic otorrhœa since he was a boy. After the first application of the ether very carefully carried out, the patient returned much elated; the noises, previously almost continuous, had ceased shortly after the application, and remained away for six or eight hours. After the second application they remained away for twelve hours, and when they returned they were of a much milder character. They continued to yield to the treatment, and the patient obtained a rest at night such as he had not known for a year. In order to satisfy himself that it really was the ether vapor that was benefiting the patient, Dr. Boylan substituted water upon two occasions; but this change was followed, in both instances, by a complaint that the noises had been severe and almost ceaseless. Upon another occasion, when the ether in the bottle used had become almost exhausted, the treatment had very little effect; but after replenishing the bottle, the good results were again immediately manifest. Dr. Boylan says he has now been treating the patient for over two months; his general condition is much improved; the noises, which are only discernible at intervals, are slight and of a totally different character (ringing). He pursues his vocation, which is that of a painter, and is very careful never to miss treatment.

Poisoning with Benzoate of Sodium.

In the *Centralblatt f. d. med. Wissenschaften*, July 21, 1888, Dr. K. A. H. Mörner, of Stockholm, communicates a case of poisoning with benzoate of sodium, which he thinks is the first hitherto reported. It seems that in the hospital of Sabbatsberg, at Stockholm, a patient was operated on for an ovarian cyst (dermoid), but the cyst could not be removed. Its contents, however, were evacuated and more than three ounces of benzoate of sodium, with some naphthaline, introduced into the sac. Some thirty hours after the operation symptoms of poisoning occurred. The patient sank into a condition of confused delirium, alternating with a sleepy condition; these symptoms passed away after a few hours. On the following day they returned in a milder form, and then staid away. The temperature during this time was 98.6° to 102.4° F. Perspiration did not occur in an important degree. There were no convulsions, but only trembling of the hands. The pulse was small, 120 to the minute.

As soon as the symptoms of poisoning appeared, the cyst was washed out with water. The urine which the patient passed after the first appearance of the poisoning was sent to Dr. Mörner for examination. The latter describes it as moderately dark, reddish-brown, and becoming somewhat darker. It showed a slight green fluorescence. The reaction was strongly acid; the specific gravity 1026; albumin and peptone were not present. It reduced an alkaline solution of oxide of copper and oxide of bismuth; but owing to the small quantity of urine it was not determined whether or not this reduction was due to the presence of sugar. The color of the urine was not due, as was at first supposed, to the naphthaline that had been used, but to the presence of a large amount of urobiline. Naphthaline was also excluded as the cause of the poisoning. On the contrary, the belief that benzoate of sodium was the cause of the poisoning seems to be completely justified, for the urine contained very decided quantities of hippuric acid, which upon the addition of hydrochloric acid crystallized out in such quantities that the fluid was almost filled with the needle-like crystals. Two quantitative estimations of the hippuric acid (one according to the method of Bunge and Schmiedeberg, the other according to that of Meissner) gave 28.68 grains and 29.43 grains respectively in about three ounces and a quarter of urine. In the refining of the hippuric acid with rhigolene only a little was extracted—1¼ grains. The rhigolene solution left behind a resinous residue, from which Mörner did not succeed in obtaining crystals of benzoic acid.

In spite of the large quantity of benzoic acid absorbed no unchanged benzoic acid was excreted. Meissner having declared that benzoic acid may be changed in the organism into succinic acid, the urine was investigated for the latter, but with negative result. The amount of nitrogen in the urine was pretty high—9 grains in about 3 ounces, which, after subtraction of about 2½ grains belonging to the hippuric acid, makes the nitrogen correspond with 46½ grains of urea in about 3 ounces of urine; it seems to him not improbable that the excretion of urea was increased, as Salkowski had found to be the case in the dog after the administration of large quantities of benzoic acid.

Dr. Mörner says that in a small portion of urine which was passed two days later he could not find any hippuric acid.

Removal of Tattoo-Marks.

The removal of tattoo-marks has always been considered a very difficult feat. Many methods have been recommended at various times, a pretty sure sign that none of them is very satisfactory. Dr. G. Variot, of the Paris Biological Society, has recently proposed a new process, which he declares to be invariably successful in removing blue and red tattoo-marks. Without hazarding an opinion beforehand, one must admit that the method is based on apparently sound principles. But it is, perhaps, well here to remark that Dr. Variot is attached to the central infirmary of the Paris prisons, and therefore in excellent position to experiment with such disfigurements, since, for some inscrutable reason, criminals, who have most to fear from identification, are just the men who most often brand their persons with indelible marks. Dr. Variot operates as follows: The tattooed parts are first wet with a concentrated solution of tannin, and with a set of tattooing-needles the skin is punctured all over the colored portions to the depth usually adopted by professionals. All the parts tattooed with tannin are next rubbed over with the lunar-caustic pencil, the silver salt being allowed to act upon the epidermis and derma until the needle-pricks have turned a deep black. The excess of liquid being now wiped off, things are allowed to follow their natural course. The whole surface treated will soon turn black. The pain, quite moderate during the operation, continues to be slight for the first two

days, and is accompanied with some local inflammation. After the third or fourth day no more pain is felt, and, except for large marks, no dressing will be necessary. After fourteen or eighteen days the eschar will fall off and leave, instead of the tattoo-marks, a reddish superficial cicatrix, which will gradually turn paler, and, after two months, almost disappear. On close scrutiny it will probably remain always perceptible, but it will otherwise be scarcely noticeable, and, at all events, the skin will show no trace of the former emblems, more or less artistic. In explanation of the remedy's mode of action, Dr. Variot thinks that the coloring-matter forming the tattoo-marks is generally localized in the upper third of the derma, the deeper portions remaining unaffected. On tattooing at first with tannin, the solution penetrates exactly to the same depth as the foreign particles, and, acting as a mordant for the silver nitrate, enables the caustic solution to permeate the derma to the proper depth and no further. Hence the skin will preserve its elasticity, and the scar be so little apparent. Before finding out the foregoing process, others were unsuccessfully tried on prisoners, at their request, and it may not be useless here to briefly point out their imperfections. Blisters, even kept up some time, proved entirely insufficient. They do not reach deep enough. Red-hot iron was found unmanageable and dangerous, too short an application being useless, and too long a one leaving painful sores and ugly scars. As to tattooing with a number of blistering or caustic solutions, including silver nitrate, they were scarcely satisfactory, although coming nearer the mark. Their main fault was that they were exceedingly painful, even when the punctures were not deep enough. But when tannin was first applied, and then lunar caustic, the results were all that could be desired.—*Therapeutic Gazette*, September, 1888.

Lead Poisoning in Domestic Animals.

The Paris correspondent of the *Therapeutic Gazette*, September, 1888, says that the effects of chronic lead-poisoning on man are well enough known, but the way domestic animals are affected under the same circumstances is not so well known. And yet a better knowledge of the symptoms would often be of some usefulness, as it would supply a clue to the cause of obscure epidemic poisonings. An interesting contribution to this branch of toxicology has been incidentally supplied by Dr. Cornillon, one of the physicians and chemists delegated to investigate the poisoning cases which not long since occurred at Gannat, near Vichy. The lead was introduced into flour through the ignorance of a workman, who had plugged with white lead a defective millstone in a mill which used to grind all the village corn. Of course the plumbic carbonate dropped off, got mixed with the flour, and poisoned nearly every one around. Among human patients the symptoms were, with a few exceptions, the customary ones. But domestic animals, fed with the same bread, afforded very curious symptoms. In some families the dogs became so restless and barked in so fearful a manner and so ceaselessly that their masters, thinking them mad, had them killed. Chickens simply died; hens bore the poison better, but stopped laying eggs. In one farm, after all the family had been sick, they had quite a quantity of the poisonous flour left, and tried to feed it to pigs. But three of the animals, which were sold soon after, died at the buyer's, and the three others first refused to eat for several days, and finally died. Their gums had the characteristic blue tinge, and obstinate constipation was observed, indicating saturnine paralysis. Another particularity worthy of remark was that, while hens ceased to lay, menstruation troubles among the Gannat women were unusually prevalent.

Extract of Pancreas in Atrophic Catarrh of the Stomach.

Dr. Reichmann, of Warscham, at the meeting of the Congress of Polish Physicians and Naturalists, July 18–22, 1888, said that atrophic catarrh of the stomach, so called because of the atrophy of the glands of the stomach and consequent lack of gastric juice which are present, was a very disagreeable form of disease of the stomach for the physician to treat. Glands that have become changed anatomically cannot be regenerated. Dr. Reichmann has observed the disease ten times in one hundred and seven patients with disease of the stomach. As neither hydrochloric acid, nor pepsin, nor other agents introduced from the outside were of assistance, Dr. Reichmann tried alcoholic extract of pancreas (12 to 15 per cent.) and pancreatine, and was convinced that digestion of the food, which before remained stagnant and coarse, was rapid and complete. The symptoms of the disease changed quickly, and the general condition of the patient improved in a pretty short time. —*Wiener med. Presse*, September 9, 1888.

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THE PERILS OF THE PHYSICIAN'S LIFE.

Among the usual vicissitudes of the physician's life are fatigue, anxiety, and exposure to disease; weariness of body and severe mental strain; and at times distrust, ingratitude, or even calumny. Besides this, on occasions which are fortunately rare, the physician is exposed to the brutal rage of jealous or unreasoning men, and his errands of mercy may lead him into great physical danger or even to death.

An illustration of the extremest outcome of the faithful discharge of the physician's duty has recently been reported from Georgia, where, on October 21, 1888, Dr. J. B. Manson, one of the most eminent, skillful and benevolent physicians of that State, lost his life as the result of a brutal assault made upon him by the father of a child he was treating for typhoid fever. No reason is assigned for this inhuman act, except that the perpetrator of it may have been insane. Be this as it may, he fell upon the benefactor of his child with the fury of a madman, and, with violently abusive language, beat him so cruelly that he died within three days.

This occurrence exceeds in horror anything which we can now recall among the unfortunate experiences of medical men. It surpasses in barbarity even those instances —of which there are not a few—in which physicians have been decoyed from their homes with a tale of suffering, in order that they might be waylaid and robbed; and it brings forcibly to mind the perils of a calling which often calls for a degree of courage and devotion which our fellow-men sometimes seem to forget.

Fortunately, as we have said, such extreme instances as this are of rare occurrence; but unfortunately instances of lesser danger are not uncommon. There is probably no medical man of much experience who could not narrate stories of imminent peril to his life, incurred solely because he followed the path of duty without flinching from its risks; of the dangerous rise of passion in the hearts of men inflamed by suspicion or brutalized with drink; of scenes of violence or of crime to which his professional duties led his feet; of outcasts or desperadoes to whom he had ministered at his own peril. In addition to this, who among us has not again and again risked his life in the care of persons suffering with contagious diseases, while those whose bereavement he was endeavoring to avert watched him with distrust and repaid him with ingratitude?

These are the hardships of the physician's lot—these and the labor and anxieties which

go with them. In looking at this side of his experience, one sometimes wonders that so many men are found, day by day pursuing their ministry of mercy, unquailing, uncomplaining, and asking no special recognition of their heroism. Into the haunts of vice of great cities, and the lairs of desperadoes on the edges of civilization, they go; into rooms reeking with infection and towns where epidemics rage; and ever they bear with them a spirit of self-sacrifice which has few parallels in mortal experience. Such, we rejoice to know, are the men who by thousands cover every civilized land with their ministry of mercy, and make up the grand army of healers.

Once in a long while—as now—some startling occurrence attracts the attention of the community to the character of their work; and then, for a little, they may find some appreciation of its hardships, and a cessation of the carping criticism to which they are often subjected. In the main, however, they cannot look for any such consideration to support them in the discharge of their duty, but rather to the principles of fidelity and humanity which are their surest and most constant reliance. "*Fortiter, fidelite*" is their motto; and "*feliciter*" is their reward when only it can be attained.

INHALATION OF CARBONIC ACID IN DYSPNŒA.

It certainly seems like "setting a thief to catch a thief" when we find it recommended to give inhalations of carbonic acid to relieve dyspnœa, and yet at a meeting of the Academy of Sciences in Paris on February 27, 1888, Dr. Edmond Weill spoke very highly of this very procedure. In a number of cases of laryngitis and advanced phthisis he had administered by inhalation from two to four quarts of carbonic acid gas, once or twice a day. The effect was to cut short paroxysms of dyspnœa, if the inhalation took place when a paroxysm was in progress; and if it was made between the attacks the respiration became much more free, and the paroxysms became less frequent, shorter and less severe. The same results were observed after inhalations of carbonic acid gas in attacks of dyspnœa in emphysema with albuminuria. Dr. Weill compares the effect of these inhalations with that of hypodermic injections of morphia.

This curious therapeutic method seems so contrary to all preconceived notions of the physiology of respiration that it would require some courage to adopt it. But it is well known that morphia will often do more good by diminishing reflex irritation, than harm by obtunding the respiratory centres; and it is by no means unreasonable to suppose that carbonic acid gas may do more good as an anæsthetic than it will do harm as a poison. It would be interesting and instructive to have some confirmation or correction on this side of the Atlantic of Dr. Weill's views in regard to the value of inhalations of this gas in dyspnœa; for if it can accomplish here what he has claimed for it, it may be a very valuable addition to our therapeutic armamentarium.

TREATMENT OF RETROFLEXION AND PROLAPSE OF THE UTERUS.

At the last meeting of the Association of German Naturalists and Physicians, Dr. Adrian Tchücking, of Pyrmont, read an interesting paper which is published in the *Deutsche med. Wochenschrift*, October 4, 1888, and in which he described and advocated a novel method of correcting retroflexion and prolapse of the uterus. His method consists in drawing the uterus forcibly downward, and passing a ligature through its cavity and substance and then through the vaginal wall, so as to fix the womb in a position of extreme anteversion.

To do this requires a needle and holder of peculiar construction, a certain dexterity, and the observance of careful aseptic precautions. The result has been very satisfactory in the twelve cases in which he had,

at the time he read his paper, carried out his method. The uterus, soon after he removed the ligature, assumed a perfectly normal position, and the troubles dependent upon its former malposition disappeared in most of the cases.

Dr. Tchücking's description of the method is not quite as full and complete as we might wish, and he does not describe the instrument he uses at all. But, so far as his paper goes, it seems to indicate that his method is not difficult of execution, that it is quite free from danger, and that it accomplishes excellent results. Under these circumstances it certainly deserves the attention of gynecologists, and we hope it may prove a useful addition to our resources for the treatment of conditions which are a cause of much suffering to women, and which often tax severely the skill and ingenuity of their medical attendants.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

At the time when the first Congress of American Physicians and Surgeons was meeting at Washington, the first gathering was held of a society to be called the American Association of Obstetricians and Gynecologists. This organization is intended to give greater prominence to the study of obstetrics than it has had in any of the existing national societies, and to blend the study with that of gynecology. The proceedings at the first annual meeting were very interesting. There was rather too great a preponderance of gynecological subjects on the programme; but the papers were excellent and the discussions were very instructive.

The idea of having an Association largely devoted to Obstetrics is a good one, and we hope this one may prove a valuable addition to the number of national associations which have of late years done so much to advance the science and art of medicine in the United States.

THE PHYSICIAN'S POCKET RECORD.

Last year we announced the preparation of a new and thoroughly revised edition of the POCKET RECORD published at this office, which has so long been a favorite with the Profession.

Inexperience in this work, however, led to our being disappointed by the printer, and when the Pocket Record came out, it had been delayed so long that many of our subscribers had to turn to other sources.

This year we have made better arrangements, and we shall have a new edition ready in good time. We therefore beg our readers to send in their orders now (without money) for Pocket Records for 1889. As soon as the books are ready, we will notify those whose orders we have received, and they may remit payment then.

The price will be: One Dollar for a Pocket Record for thirty patients a week and $1.25 for a Pocket Record for sixty patients a week.

The books for 1889 will be printed *with dates*. Orders for books without dates (perpetual) will be taken; but we think most medical men prefer the dates printed in the book.

We have on hand some of the last edition of books without dates and will sell them for fifty cents each, if the money is sent with the order.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

A TEXT-BOOK OF HUMAN PHYSIOLOGY. By AUSTIN FLINT, M.D., LL.D., Professor of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, New York, etc. With three hundred and sixteen figures in the text and two plates. Fourth edition, entirely rewritten. Large 8vo, pp. xvii, 872. New York: D. Appleton & Company, 1888. Price, cloth, $6.00.

It is not necessary to say much in announcing the appearance of the fourth edition of this magnificent work, which has already taken rank as one of the most learned and most practical treatises on physiology in the English, or any other, language. The present edition includes the most recent advances in the science of physiology, and in remodelling and rewriting the work the author has used excellent

discrimination as to what should be omitted, what retained, and what added to the contents of the earlier editions. We are glad to note also that his book is not filled with pictures of complicated and multiplied apparatus, and that the illustrations found in its pages are instructive and useful. It need hardly be added that they are beautifully executed.

There is so much which might be said in praise of this book that we have little inclination to criticise it; but we would have been glad if the author had included in it a chapter on teratology, although this may have been omitted on the ground that it belongs rather to pathology than to physiology. Again, it would be interesting to find some reference to the very curious assertions in regard to fecundation after castration of the male, such as we laid before the readers of the REPORTER, in an Editorial in the issue for May 19, 1888.

Other matters which they would like to see discussed will doubtless occur to those who study Dr. Flint's book carefully; but, on the whole, it is remarkably complete, and will not disappoint any reasonable expectation. Its literary and scientific value is very great, and its mechanical execution is equal to the best that comes from the excellent publishing house which has issued it.

A TEXT-BOOK OF PHARMACOLOGY, THERAPEUTICS AND MATERIA MEDICA. By T. LAUDER BRUNTON, M D., D.Sc., F.R S., Assistant Physician and Lecturer on Materia Medica at St. Bartholomew's Hospital, etc. Adapted to the United States Pharmacopœa (*sic*) by Francis H. Williams, M.D., Boston, Mass. Third edition. 8vo, pp. 1, 1261. Philadelphia: Lea Brothers & Co., 1888. Price, cloth, $5.50; sheep, $6.50.

This book has already been long enough before the medical profession to require little more than the announcement of the appearance of a new edition to attract the attention of our readers. The present edition has the same merits of fulness and clearness which its predecessors possessed, and bears the same impress of the individuality of the author. It has been revised so as to devote more attention to certain subjects which have undergone rapid development during the last few years, although it has not caught up with the most recent data in regard to such drugs as antipyrine, used as a nervine; calomel used as a diuretic; sulphonal; etc. So much could not, of course, be expected of a book requiring so much time for its printing as this one has required; and with extremely few exceptions, we believe it presents a very accurate view of the present state of knowledge in regard to its subject. A noticeable feature of this book is its very complete index of remedies, and a helpful index of diseases and the medicaments which may be used in the treatment of them.

LITERARY NOTES.

The first number of the *Maritime Medical News*, a bi-monthly journal, published at Halifax, Nova Scotia, has just appeared. It contains twenty-six pages of reading matter and six pages of advertising. Its size is 11¼ x 8¼ inches. The subscription price is $1.00 a year. Its contents are interesting and well edited, and it gives promise of usefulness. We share the conviction of the editors that there is room for a journal published with special reference to the professional interests of the Maritime Provinces of British America, and heartily wish this one success.

NOTES AND COMMENTS.

Carbonic Acid Water as a Vehicle for Creasote.

The taste and odor of creasote are so disagreeable to many patients that physicians have in some instances been deterred from prescribing it, especially in the large doses in which it has been advised by German writers. It is true, when given in capsules the taste and odor are not perceived; but this form of administration is objectionable when large doses are given, because the drug then reaches the stomach in a concentrated form. In the *Berliner klin. Wochenschrift*, August 6 and 13, 1888, Dr. J. Rosenthal advises the use of carbonic acid water containing cognac as a vehicle for the creasote. This combination, he says, is comparatively tasteless and obviates the disadvantages attending the administration of creasote in a concentrated form. The mixture is put up in bottles holding five and a half, ten and a half, and sixteen ounces. The smallest bottles contain from one and a half to three minims of creasote and seventy-five minims of cognac; the middle-sized bottles, six minims of creasote and two and a half fluid drachms of cognac; while the largest contain nine minims of creasote and three and a half fluid drachms of cognac. During the first week the patient is directed to take one of the smallest bottles after dinner and supper each day; during the second week he should take a half bottle of the next stronger water after breakfast and dinner, but continue to take the weaker water after supper. The quantity of creasote which he takes may in this way be increased gradually until the maximum dose of twelve and a half minims a day is reached.

Antipyretic Action of Phenacetine.

Dr. Armin Huber reports, in the *Correspondenz-Blatt für Schweizer Aerzte*, No. 18, the experience with phenacetine as an antipyretic, gathered from Prof. Eichhorst's clinic in Zurich. Phenacetine is without odor and taste, and as it is insoluble in most diluents, it was administered shaken up in some water or wine. In by far the greatest number of cases it was given in doses of fifteen grains, and only once a day. Apyrexia began in a few hours, with profuse perspiration. If the drug was given in the later hours of the forenoon, the period free of fever amounted to from five to seven hours and over. Phthisical patients remained

without exception free from fever the whole day. The increase of fever as a rule occurs slowly. The pulse often does not diminish in frequency with the fever, but remains high, though its tension is markedly increased. Collapse was never observed. The patients have no disagreeable feelings as the result of the action of the drug. Vomiting never occurred. In a few cases there was no exaltation of the subjective sensations. Huber calls attention especially to the fact that phenacetine acts as an antipyretic in all febrile diseases—in tuberculosis, typhus fever, polyarthritis, peritonitis, ulcerative endocarditis and fibrinous pneumonia. In a girl seventeen years old, with pneumonia of an upper lobe in the stage of hepatization, the temperature was brought down to normal from 102°.3 with fifteen grains of phenacetine. In a girl eighteen years old, suffering with polyarthritis, antipyrine was given in clysters to the amount of sixty grains a day for two days; the temperature on the first day fell about a degree. On the second day of taking the antipyrine, the temperature before taking it was 103°, after taking it 102°.3, and it soon again rose to 103°. Phenacetine was then given (fifteen grains) and on the first day the patient was free from fever for four hours. On the third day, when she took two doses of about sixty grains, she was without fever the whole day.

Huber considers that phenacetine is an antipyretic preferable to antipyrine.—*Wiener med. Presse*, October 21, 1888.

Causes Determining the Creation of the Sexes.

Charpentier says it seems that the absolute or relative age of the parents has a certain influence upon the production of the sex of the embryo, and so have both the more or less pronounced degree of sexual vigor of the father, and the moment at which the egg has been fecundated after its expulsion from the ovary. It seems to be established with sufficient clearness that, when the man is ten years older than the woman, while she is at the period of highest sexual activity, more boys than girls are born. Moreover, the fecundating element which is most energetic from a sexual point of view, possesses the property of engendering more individuals of its own sex. Finally, when coitus is practised slowly after menstruation (eight days at least), the production of boys is favored. The general proportion is 106 boys to 100 girls.

Bidder, whose researches have been based upon a total of 11,871 confinements, arrives at the following conclusions:

1. Very young primiparæ beget more boys. 2. Primiparæ in middle life, that is to say, at the time of full generative vigor, beget more girls. 3. After this latter period has been passed, they beget more boys. 4. The results are the same in multiparæ, but the age at which the diminution of the number of boys appears occurs a little later.

It would seem, according to Bidder, that the sex of the child holds to the male or female quality of the ovule. Male ovules will be more numerous and more likely to be fertilized in early and in advanced age. On the contrary, during the period of full generative vigor of the woman, female ovules are more numerous and more likely to be fertilized.—*Bulletin Médical*, Oct. 17, 1888.

Johns Hopkins University.

In an article in the *Independent*, Oct. 25, 1888, President Gilman says, among other things, that Mr. Hopkins left a large sum to found a hospital, with the intention that the university should establish a medical school in connection therewith. The hospital buildings are now completed, and the university has already established three professorships as the beginning of a medical department. "The only cause for anxiety in the future of the Johns Hopkins University," says President Gilman, "is the suspension of dividends by the Baltimore and Ohio Railroad. The founder gave the university fifteen thousand shares of the common stock of the railroad, and he recommended the trustees in the most explicit terms to keep, protect, and defend this investment." The income from this stock has been about $150,000 a year, and has been the main support of the university; and, now that it has ceased for a time, there is little to sustain the institution except the tuition-fees and the moderate surplus that has been accumulated in past years. President Gilman suggests that the friends of the university should make up an emergency fund to relieve its present needs, and expresses confidence that such an institution as the Johns Hopkins University "will not long be allowed to suffer for the want of an income." This confidence we believe to be justified; and certainly every lover of learning will hope that a university of so much promise may suffer no check in its useful career.—*Science*, Nov. 2, 1888.

Do Library Books Spread Infection?

A good deal of discussion having taken place on the subject of the spread of infectious diseases by means of the books in circulating libraries, the Dresden municipal authorities have had a thorough experimental investigation of this question conducted. A number of much-used volumes from the town library were taken for the purpose. The dust from the leaves and covers was sown in nutrient media and cultures reared, the result being that no microbes belonging to infectious diseases were found—the dust being, in fact, nothing but ordinary dust of a harmless character. Again, the dirtiest leaves in the books were rubbed first with the dry finger and then with the wet finger. In the first case scarcely any microbes were found on the finger; in the second case plenty were found, but all appeared to be of a non-infectious character. Especially is it noted that there were no tubercle bacilli. Lastly, books were soaked for two days in spirit containing 10 per cent. of carbolic acid. This treatment destroyed all the bacilli, and proved harmless to the volumes. The conclusion arrived at was that the danger of circulating libraries spreading infection is very slight; but a recommendation is given to dust books well before reading them, and never to wet the finger in the mouth for the purpose of turning over the leaves.—*Lancet*, Aug. 18, 1888.

Traumatic Subdural Abscess of the Brain.

Sir William Stokes, Professor of Surgery in the Royal College of Surgeons, Ireland, concludes a paper in the *Dublin Journal of Medical Science*, October, 1888, with the following deductions.

1. That after the primary symptoms of cerebral traumatism have subsided, there is frequently a latent period of varying length, during which there are no distinct brain symptoms whatever connected with abscess formations.

2. That their appearance is, as a rule, sudden, and if uninterfered with they run a rapidly fatal course.

3. That the occurrence of pus production resulting from cerebral traumatisms is not incompatible with a perfectly apyrexial condition.

4. That this latter fact will probably aid in differentiating traumatic cerebral abscess from meningeal or encephalic inflammation.

5. That both as regards color and consistence there is great variety in the contents of cerebral abscess cavities, and that, as shown in Wilm's case, published by Rose, of Berlin, they may become transparent.

6. That antisepticism has largely diminished the risks of the operation of trephining.

7. That, having regard to the great mortality of cases of cerebral abscess when uninterfered with—viz., from 90 to 100 per cent.—the operation is indicated even when the patient is *in extremis*.

8. That, in the case when the trephine opening does not correspond to the situation of the abscess, exploratory puncture and aspiration may be employed.

9. That by the adoption of this measure the necessity for multiple trephine openings can be largely obviated.

10. That the employment of a blunt-pointed aspirating needle, as suggested by Rentz, is probably the safest mode of exploration and evacuation.

11. That drainage is desirable in the after-treatment of such cases.

12. That both during and subsequent to operative interference in these cases a rigid antisepticism is imperatively required.

Valves in the Veins of the Human Intestines.

Dr. W. S. Bryant's conclusions are: "These observations show that at birth the valves in the intestines are quite numerous in man, and at this age they are more abundant in the large intestine. Also that in a few months the valves either disappear or become incompetent, with few exceptions. In adult men there are usually a few valves, and these are more abundant in the small intestine, especially in the superficial tributaries of the venæ breves. These valves are more numerous in the jejunum, and disappear as we approach the cæcum.

"Though the valves just described were discovered since Hochstetter's paper was written, his remarks on the significance of valves in the portal system will apply to them. After alluding to the fact that the presence of valves in the branches of the portal vein seems widely spread among mammals, he says: 'But only in individual species, as in the beasts of prey, do the valves possess great importance in connection with the circulation. In many species they are to be considered much more as rudimentary organs, which act either only in youth, as in men and perhaps the ape, and later in part or wholly disappear; or for the most part, as in the rabbit, are very imperfect.'"—*Boston Med. and Surg. Journal*, Oct. 25, 1888.

Decree Concerning Foreigners in France.

This decree, which has now been signed by the Minister of the Interior and the President of the Republic, and has already come into execution, contains some points of interest. It is required that every foreigner not domiciled in France, but who intends to make his residence in the country, shall, within fifteen days after his arrival, make the following declaration to the mayor of the place in which he wishes to reside. 1. His name, surname, and those of his father and mother. 2. His nationality. 3. Date and place of birth. 4. Place of former residence. 5. Means of existence. 6. Name, age, and nationality of his wife and children, if any. Documents must be shown to support his declaration. The declarations must be made, as far as Paris is concerned, to the Prefect of Police. Strangers at present residing in France, and not having a fixed residence (*non admis à domicile*), will be allowed a delay of one month to enable them to comply with the foregoing requirement. Infringements against these formalities will be punished by ordinary police penalties, without prejudice to the right of expulsion possessed by the Minister of the Interior.—*Medical Press and Circular*, Oct. 10, 1888.

Statistics of the Population of France.

The *Journal Officiel* has just issued the report on the population of France for last year, which will be found more or less interesting. 278,056 marriages, 899,333 births, and 842,797 deaths took place during the period, showing an increase in the population of 56,536 individuals, or 3,920 more than during the preceding year. In spite of the increase, however slight, it is noteworthy that there is a steady decrease (12,808 annually) in the births during the last seven years. Of the total number of births registered during the year, 73,854 were illegitimate, giving a proportion of over 8 per cent. of the whole. In the department of the Seine (Paris) the percentage reached the high figure of 25, while in that of Finisterre it sank to 2. With reference to the fecundity of marriages the result is deplorable. A hundred women under fifty years of age furnished to the population only sixteen children, that is to say, one birth takes place in every six households. The proportion of boys to girls is as 105 to 100, but the advantage is lost in the deaths, as more men than women die in the year (107 to 100). The average number of deaths per 1,000 for 1887 was 22.—*Medical Press and Circular*, October 10, 1888.

The Limits of Hearing.

In the *Glasgow Medical Journal*, August and September, 1888, Dr. J. Kerr Love communicates an elaborate inquiry into the limits of hearing. A summary of his paper is as follows:

1. Notes produced by 15 or 16 vibrations per second are the lowest which can be heard by the human ear. The difficulty of producing vibrations of sufficient amplitude to make such notes heard is great, but it is probable that sounds caused by a smaller number of vibrations are perceived as separate impulses and not as true musical sounds. Many ears cannot hear notes caused by less than 24 vibrations.

2. The most powerful very high notes are produced by very small tuning-forks, and by them a vibration number of over 40,000 has been heard by Dr. Preyer and a few other observers. Other and more convenient means for producing very high notes are Mr. Galton's whistle and the small open pipes which the author has described in this paper. These tests show that most ears can hear nothing when the vibration frequency is over 30,000 per second. Many are deaf to notes produced by more than 20,000, and some to notes of 15,000 vibrations; in a few cases deafness to notes of 5,200 or 5,500 vibrations has been recorded.

3. The least observable difference in pitch is for untrained or slightly trained ears difficult to state, but (exclusive of cases of tone-deafness) it may be put down as from 1-6 to 1-40 semitone. The ears of such trained musicians as violinists, tuners, and some pianists, can perceive with certainty a difference of 1-64 to 1-80 semitone. All observers, but especially the untrained, detect sharpened better than flattened intervals. Generally speaking, Weber's Law holds good for all but the highest and lowest parts of the musical scale.

4. No quite satisfactory test has yet been found for the distance at which a sound of constant intensity can be heard. Politzer's Acoumeter is the best and most convenient test, and is heard by normal ears in almost perfect stillness at a distance of 49½ or 52½ feet.

5. Cases of tone or note deafness (deafness to intervals of a whole tone or more) are very rare, but some well-authenticated instances have been recorded.

Syphilis and Diabetes.

An interesting case is recorded in the June number of the *Annales de Dermatologie*, by Le Monnier, of Flers, of a patient 50 years old, who for five months had been suffering with diabetes, and passing sugar in his urine to the extent of 2 to 2½ ounces per quart. His condition was becoming serious, and the symptoms were increasing in severity, when suddenly he developed a gumma of his pharynx, which subsequently ulcerated, proving the presence of a syphilitic taint of which the patient had previously denied all knowledge. From the time that the gumma was discovered the patient was treated with iodide of potassium. At the end of eight days there was great improvement in the local affection, and, remarkably enough, the amount of sugar in the urine had fallen to 405 grains per quart. The treatment was continued, and, after the lapse of three months, the ulceration of the pharynx had cicatrized and all trace of sugar in the urine had vanished. The author remarks that, although the occurrence of syphilitic diabetes has not been disputed by Fournier, Lécorché, and others, still the case is worthy of publication owing to the fact that the usual diabetic treatment yielded no definite relief, and that the complications and progress of the disease were immediately arrested as soon as antisyphilitic remedies had been administered, resulting in the cure of the patient.—*Medical Press and Circular*, Oct. 10, 1888.

Vegetable Cows.

Several natural orders of the vegetable kingdom include plants that are characterized by the secretion of a fluid closely resembling milk in appearance and consistency, and a familiar example of these is to be seen in our common milkweed (*Asclepias cornuti*), which is well known to everybody. In some plants this milky fluid is of the most venomous nature; in others it possesses active medicinal virtues; in others it yields a product (such as india-rubber and gutta-percha) of the highest importance to the arts and industries; and in others still it proves of value as a human aliment. Since the same general properties characterize the plants of each natural family it seems an anomaly that, in the same order, we should find the species of one genus producing a lactescent fluid of a highly poisonous nature, and those of another yielding one that is entirely innocuous. Yet such is often the case, and we have a striking example of it in the bread-fruit order, the *Artocarpaceæ*, which, on the one hand, includes the celebrated upas tree of Java, which, when pierced, exudes a milky juice containing an acrid virulent poison (antiarin), the smallest quantity of which will kill the largest animal; and, on the other, the famous *Brosimum utili* of South America, which yields a copious supply of rich, wholesome milk, of as good a quality as that from the cow. There are several other instances in the vegetable kingdom of such an association, in the same natural order, of plants that produce a noxious lactescent juice with others which yield a wholesome one adapted for man's use, and which may therefore be designated as "vegetable cows." To speak only of the latter class, the most remarkable example is the species of *Brosimum* just mentioned, which was discovered and made known by the celebrated traveler Humboldt. This tree forms extensive forests on the mountains near the town of Coriaco and elsewhere along the sea-coast of Venezuela, growing to upward of one hundred feet in height, with a trunk six or eight feet in diameter, and branchless for the first sixty or seventy feet of its height. It is popularly known as the cow-tree, *palo de vaca* or *arbol de leche*. Its milk, which is obtained by making incisions in the trunk, so closely resembles the milk of the cow, both in appearance and quality, that it is commonly used as an article of food by the inhabitants of the places where the tree is abundant. Unlike many other vegetable milks, it is perfectly wholesome and very nourishing.—*Scientific American*.

New Treatment for Dislocation of the Jaw.

In *L' Union Médicale* is an account of a sportsman, who, in calling to his dog, dislocated his jaw. With great difficulty he made his way to the nearest town, arriving late at night, and rang the bell of the first physician he could find. The doctor put his head out of the window and asked who was there. But the sufferer was unable to utter a word, and dismayed at the closing of the window, rang again, still more vigorously. The same scene was reënacted several times, until the doctor, thinking it a practical joke, stole downstairs, and opening the door suddenly, struck the patient full in the face and slammed the door. As soon as the patient recovered from his astonishment he found his jaw entirely in place, and calling out "thank you," he went on his way rejoicing.—*Northwestern Lancet*, Oct. 15, 1888.

Case of Delusional Insanity.

"Some months ago," says the *Sacramento Medical Times*, October, 1888, "a wealthy rancher of this county conducted himself in such a manner that his family became apprehensive for their safety, and decided to confine him in an asylum. His resentment was principally directed against his wife, a woman of excellent character, advanced in years, the mother of a large family, whom he accused of having had intercourse with some of the farm hands. He stated that on several occasions he was on the same bed on which these acts were perpetrated, but in a cataleptic condition, the result of chloroform which she had administered. The method of administration was interesting. She had placed a handkerchief, saturated with chloroform, in the pocket of a dress which hung four feet from the head of his bed. On these facts and much additional evidence, three physicians decided that he was a monomaniac and that it was unsafe for him to be at large. A jury was impaneled, and in the face of the medical testimony and overwhelming evidence furnished by the accused and his family, they acquitted him of the charge. The result was mainly due to the efforts of able counsel for the defense. The accused had numerous friends who firmly believed in his sanity, and regarding him as the victim of designing people, helped him with testimony and funds. One man in particular was earnest in his protests against the outrage sought to be perpetrated upon his friend. Several months after the trial he asked the victim to witness a will of which he was the executor; this was duly done. Subsequently the testator died and the will was contested, when the same man testified upon oath that he never signed or saw the will, denied his own signature, and positively accused his friend, the executor, of sequestrating $1000 of the funds involved. Many similar cases have, no doubt, occurred, and it is most desirable that they should be recorded as furnishing important evidence on the intricate subject of mental jurisprudence."

—Professor Sachs, of Würzburg, has been invited to the Chair of Botany in the University of Munich, lately occupied by Professor Nägeli.

—Professor Unverricht, of Jena, has been offered the Chair of Medicine in the University of Dorpat, made vacant by the resignation of Professor Schultze, who went to Bonn.

NEWS.

—Dr. Harrison Allen has moved to 1933 Chestnut St., Philadelphia.

—Dr. Robert R. Livingston died in Plattsmouth, Neb., Sept. 28, 1888.

—Dr. Galippe, a French dentist, declares that antipyrine blackens the teeth, especially when they have lost their enamel.

—Dr. Joseph O'Dwyer has been appointed Professor of Diseases of Children in the New York Post-graduate School and Hospital.

—The remains of Dr. Jacob Vreeland, formerly of Brooklyn, N. Y., were brought to New York City from England, October 2. Dr. Vreeland went abroad on a vacation last August, but died September 2, of pneumonia. He was 60 years of age.

—Dr. John B. Hamilton has been appointed Editor of the *Journal of the American Medical Association*, and it is said that he intends to resign his position as Supervising Surgeon-General of the Marine Hospital Service, in order to accept the appointment.

—Thirty-three new cases of yellow fever and five deaths were reported in Jacksonville, Fla., Nov. 10, 1888. The weather is said to be cool, but there has been no frost. New cases are also reported from Gainesville and Fernandina, Fla., and from Decatur, Alabama.

—The committee in charge of the annual banquet of the Ex-Resident Physicians of the Philadelphia Hospital, Blockley, announces that the banquet will be held December 4. The time and place have not yet been announced. The committee is very desirous of having the names and addresses of all Ex-Resident Physicians, and will be glad to hear from any upon this point. The Secretary is Edward R. Stone, M.D., 1539 N. Nineteenth Street, Philadelphia.

—The Paris correspondent of the *Lancet*, Oct. 27, 1888, says that at a recent meeting of the Academy of Sciences, Professor Bouchard communicated, in the name of MM. Charrin and Armand Ruffer, a work on the elimination with the urine of soluble vaccinal substances. The authors show that the soluble substances manufactured by the microbes can traverse the body of the animal and be eliminated with the urine, whilst still preserving their property of conferring immunity. The production of vaccinal matter should be attributed directly to the microbes, and not to the cells of the living organism.

—The latest report of the An Ting Men Missionary Hospital, in Pekin, says the *Ledger*, Nov. 12, 1888, contains some interesting information in regard to certain classes of Chinese patients. Suicides are very common in Pekin, a strong extract of opium being most commonly employed for the purpose, but stabbing with a knife in the abdomen is common. In one case of this kind, which was treated at the hospital, the reason assigned for the act was that the man had applied to a friend for a loan of money and been refused. In order to spite the niggard, he committed suicide, that his spirit might come back and perpetually annoy the latter. Possession by demons or animals is a complaint for which patients constantly demand treatment. The animals in question are most commonly the fox, weasel, hedgehog, snake and rat. Persons possessed of one or other of these are supposed to have extraordinary power in revealing future events, curing diseases, or indicating lucky days and numbers.

HUMOR.

Brown—"You don't look well lately, Robinson." Robinson—"No; I can't sleep at night on account of lung trouble." Brown—"Nonsense; your lungs are all right!" Robinson—"Yes, mine are; the trouble is with the baby's."

Editor—"Uncle Rastus, we want another man at the office to help keep things in shape. Do you think you would like the job?" Uncle Rastus—"I reckon I wud, Mistah Shears; but I dun know. No man kin tell how he wud like editin' till he tries, sah."—*Harper's Bazar.*

Was a Boy Once Himself.—Boy—"Say, Mister, father wants to know what's the cheapest way of gettin' teeth inserted." Village dentist (significantly)—"Well, I reckon the cheapest way that I know is to come and steal my apples when my bull-dog's round."—*Harper's Young People.*

"This is indeed a hand-to-mouth existence," sighed the druggist, as he tore off and licked the postage stamp for a chance customer. "I'm also doing a light business," said the man at the cigar counter; "at least my gas jet seems to be the only thing wanted by half the men who come in."—*Puck.*

In Financial Distress.—Bobby's Uncle James had given him a penny to invest at the candy store, and he darted off filled with glad anticipation. Presently he returned, crying bitterly. "What's the matter, Bobby," inquired his Uncle James, "did you lose your penny?" "N-no, sir," sobbed Bobby, "t-taint lost, it's jest swallered."—*Epoch.*

A Question of Locality.—"This is a very grave case, my man," said a doctor, leaning over a wounded man in a hospital. "Is it really dangerous, doctor?" "Very; you have been injured in the lumbar region." "Now that's just where you're mistaken. I was never in Maine in my life. I got this wound in the Blue Mountain region."—*Harper's Bazar.*

What the Doctor Pronounced It.—"What did the doctor pronounce your ailment?" inquired the wife, with a tremor of anxiety in her tone, as she came into her husband's sick-room. "He pronounced it as if it were spelled bronkeetus," exclaimed the indignant Bostonian, straightening himself up in bed, "and I requested him at once to make out his bill and go."—*Chicago Tribune.*

A Coroner's Verdict.—The following delicious coroner's verdict is in print, apparently a specimen of Baboo English, that is, English as written by a native of India. This was rendered upon an ill-fated Hindoo. "Pandoo died of the tiger eating him; there was no other cause of death. Nothing was left except some fingers, which probably belonged to the right or left hand."—*Boston Med. and Surg. Journal.*

Suspected a Trap.—"Here's an article headed: 'Mavelous Escape of a Distinguished Citizen from a Horrible Death,'" said the dutiful daughter, who was reading the morning paper to her invalid father. "'The friends of Mr. J. Alpheus Bramble were shocked on learning, a few mornings ago, that—'" "Jane," interrupted the irritable parent, "before you read any more of that you will oblige me if you'll look about half way down to the bottom of the article and see whose patent medicine it's advertising."

MARRIAGES.

Theiss—Manton.—On Sept. 25, 1888, by Rev. J. H. Conkle, H. C. Theiss, M.D., to Miss Eva Manton, both of Akron, Summit Co., Ohio.

Mecaskey—Martin.—On Oct. 18th, at Albion, Mich., by the Rev. J. C. Floyd, Dr. J. W. Mecaskey, of Phila., to Mary Katherine, daughter of Dr. R. A. and Mrs. Isabella Martin.

THE

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COMMUNICATIONS.

THE DOUBLE ACTION OF MEDICINES AS ILLUSTRATED BY DIGITALIS.

BY BOARDMAN REED, M.D.,
ATLANTIC CITY, N. J.

In the London *Practitioner* for April and May, 1888, there appeared a paper contributed by the writer, entitled "The Primary and Secondary Action of Drugs." It was based upon a somewhat thorough study of the results of experiments on animals by leading German, French, English and American pharmacologists, as well as a considerable clinical experience extending over a period of ten years. In the August number of the *Therapeutic Gazette* of which Professor H. C. Wood is senior Editor, this paper was the subject of a long editorial in which the method and conclusions of the writer were attacked and an attempt made to refute them. The writer replied by contributing to the October number of the same journal an article in which he defended and still further fortified the position assumed. In the same number of the *Gazette* the editors returned to the attack. Thereupon, the following brief rejoinder was submitted. It was declined with the information that the controversy was closed:

In their first criticism of the theory recently defended by me, that most drugs have a double action, the editors of the *Therapeutic Gazette* conceded that "there are certain drugs which in large doses act in a manner apparently antagonistic to the effects of their smaller doses." In the October number of the *Gazette* they go further and admit that "*many* drugs in small doses appear to act in a method antagonistic to that in which they act in large doses." That is getting on.

The elaborate communication contributed by me to the *Therapeutic Gazette* for October, traversed fully the questions between the editors and myself, and though it was sharply criticized in the same number, not one of the points seems to me to have been really answered.

For rejoinder I might well content myself with begging any reader who is interested in the subject and still in doubt about it, to re-read carefully both the criticism and the communication itself.

There is in the criticism, however, a semblance of reply to my argument in so far as concerns digitalis. The editors in their August number had squarely denied that digitalis even in overdoses can paralyze the heart, and with equal positiveness had asserted without qualification or exception, that "the heart is arrested in permanent spasm of its muscle [*i. e.*, in systole] by substances of the digitalis group." In the October number I showed that Nothnagel and Rossbach, two of the most celebrated pharmacologists in Europe, had announced as a result of their minute study of the drug—one of the most elaborate and exhaustive to be met with in medical literature—that large doses of digitalis in the case of mammals *do paralyze the heart*, and that so far from being constantly arrested in systole by overdoses, it comes to a standstill finally, *paralyzed in the opposite condition of diastole.*

Contradiction could not be more positive

and it comes not from me or any obscure person whose laboratory experiments might be questioned, but from authorities of the highest eminence, practical experts in experimentation on animals, and from physiologists thoroughly trained in laboratory work.

It was shown by me, moreover, that Huchard, another eminent transatlantic expert in the same field, had pointed out that it is only in the case of cold-blooded animals, such as frogs, that digitalis arrests the heart in systole, while in warm-blooded animals, including man, it stops it in diastole. Prof. Lauder Brunton, the most eminent pharmacological authority in England, was quoted against the assertion that the heart is uniformly arrested in systole in digitalis poisoning.

Professor Phillips, also of London, and Professors H. C. Wood and Roberts Bartholow of Philadelphia, all noted authors of standard works on Materia Medica, were also quoted to show that digitalis affects various parts of the circulatory apparatus in a two-fold manner. They thus aid in clinching the point that the foxglove is no exception to the rule that the small and large doses of active drugs generally have opposite actions.

The citations from these authorities were clear and emphatic to that extent and quite incapable of being misunderstood by any physician of even average attainments.

How do my critics meet all this array of definite and exact testimony? Their answer may be arranged under three heads:

1. They charge me personally (not Nothnagel, Brunton *et al.*) with not being a trained experimentor on animals, and complain because I did not go into the laboratory and illumine the question by taking the cut-out heart of the frog and administering to it various doses of digitalis. If I had rested the case on experiments of my own, such objections might have had force

2. They try to explain away the statement, cited from Professor Wood's "Therapeutics," to the effect that moderate doses of digitalis cause a strong pulse and high arterial pressure, while poisonous doses cause a weak pulse and "lowered arterial pressure," so as not to admit antagonism between the different ranges of dose. Their explanation, which is in the nature of an hypothesis, is more ingenious than conclusive. I will not stop now to dissect this hypothesis and show, as can be done, that it is not in accord with the views of most other pharmacologists, and that it is quite insufficient to account for all the facts.

They do not have a word to say about the much more pointed testimony to the double action of digitalis cited from Nothnagel and other celebrated authorities.

3. They acknowledge, however, finally, that "digitalis may sometimes arrest the heart in diastole," notwithstanding that in their first criticism they had unqualifiedly declared that it is "arrested in permanent spasm of its muscle"—*i. e.*, in systole. To break the force of this tardy admission, they now claim that this diastolic arrest is not due to paralysis of the heart but to stimulation of the vagus nerve. How then about the still later stage of the poisoning, in which the vagus nerve itself has been shown to be paralyzed?

To clear up this point it is sufficient to refer the reader again to the lucid and comprehensive statement by Nothnagel and Rossbach of the results of large doses of digitalis, cited at length in my previous communication. These authorities show clearly that while vagus stimulation may account, in part at least, for the eccentricities of the pulse in the earlier stages of digitalis poisoning, there results paralysis of the heart muscle itself in the final stages of such poisoning, except in the case of frogs, in which death often occurs in systole before the final paralytic effect of the drug has been attained.

Professor H. C. Wood, the distinguished senior Editor of the *Gazette*, has himself, in his "Therapeutics," furnished several pages of testimony pointing unmistakably to the fact that, while in small doses digitalis is, as he phrases it, "a powerful stimulant to the circulatory system," in very large doses it ultimately leads to heart failure and death. However much one may quibble or split hairs in discussing the supposed action of the drug in detail, the great central fact just stated cannot be gainsaid. Other pharmacologists all corroborate it more or less explicitly, however confused and befogged their testimony may sometimes seem to be by detailed accounts of their demonstrations of the supposed action of the drug on various cardiac structures, including the hypothetical nerves, ganglia, etc., which, following Schmiedeberg, physiologists still assume, though the exact functions of these have not been proved. Indeed, Brunton, the ablest and frankest of all the workers in this field, distinctly says in the last edition of his great work on "Therapeutics"—page 314: "Schmiedeberg's hypothetical schema has

been most useful for several years, but facts which it will not explain are beginning to accumulate, and we must look in another direction for their explanation. The whole question of the action of drugs upon the heart is far from being completely solved."

So much for the evidence from the laboratory concerning digitalis. The experimenters agree that it is highly toxic, easily killing when pushed, and not even Professor Wood will ever succeed in proving that it does so in mammals, at least, by making the heart too strong. Clinical experience is all the other way, and shows emphatically that over-dosing with the drug leads ultimately, and often speedily, to cardiac weakness and death from heart failure. Whether it is only the heart muscle or the hypothetical intra-cardiac ganglia which are paralyzed, is not of vastly great importance, considered from the clinical standpoint.

Right here it is in place to say that it is from the clinical standpoint and for the benefit of clinicians and their patients that I am considering this whole subject. It is only in the hope of advancing in some small degree the transcendantly important art of practical medicine that I have consented to make myself a target for personal attacks by championing a somewhat novel view of drug action, and thus demonstrating that there yet lurks, in some conservative corners of our progressive medical profession, a little of that intolerant spirit which Molière so cleverly satirized by making a candidate for medical honors take an oath never to alter the practice of physic. Yet it has not been intended to say anything not complimentary of the able and earnest men who are engaged in experimenting with drugs upon animals. On the contrary, they are entitled to high praise. Though their results can seldom be received as conclusive till verified at the bedside, very much of their work is distinctly helpful in the direction of advancing therapeutics; and if the theory of the double action were accepted, that large part of the toxicological facts accumulated by them, which, as intimated before, are now comparatively barren and useless to clinicians, could at once be turned to practical account.

The editors of the *Gazette* offer to award me great glory if I will "prove in the laboratory" that digitalis can paralyze heart muscle, and also prove, in the same way, the contrary of various propositions which they lay down. My answer is: 1. That I am not writing up this matter for glory or credit, but for other reasons, as already explained; 2. That other men, who are experts in laboratory work, have demonstrated what is demanded regarding digitalis and have furnished materials, as a result of their experiments, which prove, in my opinion. that all the drugs referred to have double actions.

If the aforesaid editors cannot be convinced by the testimony of eminent authorities in their own special field, they would not believe even one raised from the dead, still less my own testimony, supposing that I could afford to equip a laboratory and find time from a busy practice to make the necessary experiments. If they really doubt that aconitine, veratrine, and viridine have double actions, and will accept as conclusive the experiments of any reputable pharmacologists, I will undertake to furnish the necessary evidence; and in case it should turn out that any of the drugs mentioned has not been sufficiently studied, I will then gladly make additional experiments, either on animals or on men or both, to supply the deficiency. Otherwise it will be quite useless to prolong this controversy. At some future time, however, I may publish numerous reports of clinical cases showing the efficacy of unusually small doses of medicines, administered to antagonize pathological conditions such as could be caused by toxic doses of the same. I hope then to be able to demonstrate at length and with sufficient clearness to convince even the most timid therapeutist that he need not be deterred, by the fear of treading on heretical ground, from curing his patients with the smallest effective doses, whenever these happen to suit best.

Indeed, one of the most satisfactory things about the theory of the double action of medicines is that it affords an all-sufficient scientific basis for maintaining that the small-dose effect, as well as the large-dose effect, is really antagonistic to the disease. It thus quite does away with the necessity for lugging in the irrational dogma of *similia similibus curantur* to account for such cures as those of vomiting by drop-doses of wine of ipecacuanha, or of Fowler's solution, and of diarrhœa by fractional parts of a grain of gray powder, rhubarb, or podophyllin. In short, it affords an intelligible and rational explanation of all curative effects obtained with relatively small doses of tissue-disturbing remedies, whether administered by regular physicians or by homœopaths, when the latter do not administer amounts so infinitesimally small as to be incapable of producing any effects.

STRANGULATED HERNIA; OPERATION AND AUTOPSY.

BY J. M. ANDERS, M.D.,
PHILADELPHIA.

Whilst cases of strangulated hernia are not infrequently met with in practice, strangulation by bands of omentum in unusual situations are not of common occurrence, and are always interesting subjects for study. Without stopping to consider statistics showing the relative frequency of this latter condition—a subject with which the progressive surgeon is already familiar—the following case, which exhibits phases of unusual interest, seems worthy of being recorded.

J. R., 41 years old, by occupation a foreman in a plastering-hair manufactory, had, before his last illness, always enjoyed excellent general health. For several years he had had, however, an inguinal hernia, which occasioned him no trouble, but for which he had worn a suitable truss. On August 18, 1888, he was seized suddenly, while at work, about 9 A. M., with violent, paroxysmal pain, chiefly localized at the intersection of an imaginary line dividing the umbilical and left lumbar regions, with a line connecting the anterior superior spinous processes of the ilia. At first the intervals between the paroxysms of pain were from five to ten minutes, but the pain gradually became more frequent, until it finally was almost continuous. Dr. Strobel was then summoned; he prescribed an opiate and ordered the patient to be taken home. The family physician, to whom I am indebted for the facts in the history of the case up to the time of my own connection with it, was then sent for. During the evening of the same day vomiting set in, and continued at brief intervals. Though the patient's truss had been removed in the morning, the hernia did not appear in the scrotum, and there was at this time neither pain nor tenderness on palpation over the inguinal region.

August 19, 10 A. M. The patient obtained a few hours' sleep during the previous night. The pain at this time was agonizing, the paroxysms occurring in quick succession, while vomiting was also continuous. A hernial protrusion of about the size of a duck's egg (which was about the size of his old hernia) was now found to occupy the upper portion of the scrotum and the inguinal canal; and almost immediately the seat of greatest pain was, as it were, shifted to the same locality. On the evening of the same date, pain continued unabated, and there was stercoraceous vomiting. Efforts at reduction of the hernia were unsuccessful.

August 20, at 6 o'clock A. M., I was requested by the attending physician to see the case with him immediately. The patient was found to be in a state of collapse, vomiting incessantly and suffering greatly from racking pain referred to the protruded mass. The point of greatest tenderness on palpation was at this time about two inches above the inguinal canal, giving rise, when coupled with other symptoms present, to the suspicion that in this vicinity a constriction of the intestine existed. Failing in our efforts to reduce the hernia by taxis, I advised immediate operation. A few hours later, Dr. John B. Deaver performed herniotomy; and upon request, he has kindly furnished a succinct account of the most interesting facts pertaining to the operation, together with the results of the autopsy, which he was permitted to make two days later.

"I saw the case just described with Drs. Anders and Himmelwright, August 20, at 11 A. M. I fully concurred with them as to the propriety of exploring the left inguinal canal, which was the seat of a tumor. The field of the operation, as well as the surrounding parts for some distance, were subjected to the ordinary preparations for a strictly antiseptic operation, and the patient etherized by Dr. Himmelwright. Dr. Anders and my student, Mr. Benjamin Michel, assisting me, I laid open the left inguinal canal and the upper part of the cavity of the left scrotum, by an incision carried over and parallel to the axis of the canal. Both the canal and the upper part of the cavity of the scrotum were found to contain a hernial sac, the contents of which, on opening the sac, proved to be an old omental hernia, there being no gut to be seen or felt. The omentum was slightly adherent to the sac at several points, but was otherwise healthy; this condition of the parts proved that the immediate sufferings of the patient were not due to this mass of great omentum, but, coupled with the symptoms of the case, suggested that the cause of the trouble was higher up. With the approval of Drs. Anders and Himmelwright, I therefore freed the great omentum, gaining access to the abdominal cavity, which was explored with the fingers, but with negative results. The incision was now prolonged upward in the

line of the left linea semilunaris for a distance of one inch, when the abdominal cavity was again explored with the finger, this time detecting an unyielding knuckle of intestine which, to the sense of touch, appeared softer than normal. As this could not be seen, the incision was carried one and one-half inches higher, in the same line as before, when a knuckle of softened and discolored small intestine, constricted by an omental band, was exposed. The constriction was relieved by the knife, so that the small intestine could be moved freely. The diseased portion of the small intestine, as well as the mass of the great omentum which had occupied the herniai sac, was treated with warm towels by Dr. Anders, while I prepared to complete the operation. The color of the intestine having improved slightly under the application of the moist heat, I thought it best to return it, as the patient's condition was now very unfavorable, not permitting me either to resect or to make a temporary artificial anus. The great omentum being apparently healthy, I returned it also. It now remained for me to close the wound, which I did with prepared aseptic silk sutures, carrying them down through the peritoneum, dressing it with wet bichloride gauze, bichloride cotton, and an aseptic bandage. During the operation, bichloride solution of the strength of 1 to 3,000 was used for the sponges and for irrigation, till the abdominal cavity was opened, when it was substituted by hot water. I saw the patient at 11 P. M., the same day, and found him comfortable; he had not had a return of the agonizing pain of which he complained before the administration of the anæsthetic. His general condition was anything but favorable; he was profoundly shocked, and did not show any tendency toward reaction, notwithstanding the use, both internally and externally, of the remedies proper in these cases. I saw him again on the morning of the following day, when it was only a question of his living a few hours. He died at 2.30 P. M., August 22. In the presence of Drs. Anders and Himmelwright and Mr. Michel, I made the autopsy. The body was that of a well-preserved man. I opened the abdomen through the linea alba; all its contents were found normal except the portion of the great omentum that had occupied the site of the left inguinal canal and the upper part of the cavity of the left scrotum, and the knuckle of the small intestine, which had been the seat of constriction; both these structures were gangrenous."

After the operation Dr. Deaver expressed the opinion that the patient could have been relieved, and with greater dispatch, by an abdominal section through the median line. He thought, however, that there were probably few experienced surgeons in such a case who would not have first explored the inguinal canal, which was the seat of the tumor, and subsequently have extended the incision sufficiently to examine thoroughly the contents of the abdomen. Had this patient not exhibited a protrusion from one of the hernial orifices, and yet displayed the same symptoms, he would have advised an abdominal section.

Obviously, in the light of the developments of the post-mortem inspection, the mass of great omentum separated from the hernial sac should have been tied off and not returned to the abdominal cavity.

THE PREVENTION OF CONCEPTION.

BY ERNEST C. HELM, M.D.,
BELOIT, WIS.

I have been greatly interested in the discussion of this subject, and of "The Conjugal Question," as the various articles and Editorials on them have from time to time appeared in the columns of the MEDICAL AND SURGICAL REPORTER. These questions are so difficult to handle, that they are greatly neglected; yet a calm, clear, clean treatment of them is of the utmost importance. These matters should be thoroughly understood by the physician; and I think, in certain selected cases, his duty to his patients and to humanity should compel him to explain them freely and fairly. Upon a careful consideration of them depends, in large measure, the welfare of the community, and it is with extreme diffidence that I approach the subject.

Such various views are held, not only among the laity, but also in our profession, that the broadest charity should be used in judging one who has the temerity to differ at all from the accepted opinion of ages. In a former number of the REPORTER, one physician thought it an insult to the young wives of this country to suppose that they would ask what the consequences of sexual intercourse are. I can, however, see no insult to them in such a supposition; for they *do* ask the question. Not all, perhaps, but it is no tribute to their intelligence, if they blindly accept intercourse for the pleasure it gives them or their husbands,

without thinking or asking what the consequences will be. They ought to know; it is their duty to know; and they should conceive and bear children, not unwillingly or unknowingly, but in the full knowledge of what they are doing.

Many girls marry at fifteen or sixteen years of age, and, if strong and well developed, it may be that physically they can endure frequent pregnancies without injury to themselves or their offspring. In such cases it may be that the physician would not be justified (if asked) in offering suggestions regarding the prevention of conception; and if, simply for social reasons or to escape the pangs of child-birth and the trouble and expense of rearing children, the mother should visit the abortionist, then the sin would be upon her own head.

But even in such a case is it wise for this young girl "in her teens," and scarcely out of short dresses, not only to assume the new and strange duties of housekeeper, home-maker and wife, but at the same time that most sacred of relationships—mother? We find her married, and cannot change that; so it will do no good to try to escape the dilemma by saying that she should not have married. She *is* married; now shall she become a mother at once? Common sense would suggest that, now that she is married, sexual intercourse should be at rare intervals, and it would be better for her if she should not become pregnant for a few years. She will then have become more mature, and can better bear and rear children. Child-mothers do not make the best mothers, and child-bearing often wrecks their physical systems. Young husbands and wives are themselves developing, and are just beginning to enjoy life Would not the first few years of their married life be far happier if they could devote it to understanding each other, and securing and making a real home, so that when babies should come they could the better be cared for?

Even granting that the physician should say nothing here, it is different in the case of the young, sickly, immature girl, who has been so injudicious as to marry, though utterly unfit for it. Now if she soon conceives, and pregnancy, instead of restoring her to health, as it may do, carries her to the verge of consumption or the grave, and the child is feeble and puny, has the trusted family physician no duty to perform toward this poor girl? Her happiness, her life even, are in his hands. Must he be content with chiding her for her early marriage, and telling her that she must bear the consequences? He may feel sure that another pregnancy may be fatal to her, and probably will be: would it not be proper then, quietly yet earnestly, to talk with the young husband and wife—mere children as they are—about avoiding frequent intercourse?

But if he stops here, is his duty fully done? I once heard a famous professor, in a case in which the young mother, scarce twenty-two years old and very slight and feeble, gave the history of three child-births and thirteen miscarriages in seven years, say, with a shrug of his shoulders: "The only thing to do with this case is to chain up the husband." The woman's health was of course greatly undermined, and the youngest child, sandwiched in between the miscarriages and reared by this unfortunate mother, was in a very precarious condition. Now should this physician have been content with giving advice which he knew must be disregarded, or at least would be?

Very young wives. no matter how good their health, are apt to break down under the strain of frequent child-bearing. To whom can they come for relief if not to the family physician? If he will not give them some simple method of preventing conception, they may when pregnant seek the services of the professional abortionist. Would not these vampires cease to exist if the family physician did his full duty by his patients?

Foreigners call abortion the "American crime"—but it is a misnomer. Abortion is frequent among American women because they are not as robust as certain other classes. but the abortions are not generally brought on by themselves or their physicians. They are intelligent, and may take measures to prevent conception rather than run the risk of accidental abortion, which would be so apt to follow conception if they are in feeble health.

When I hear men gravely denouncing the prevention of conception as a crime, I only wish that they could bear and rear one child. Women, as the weaker and finer creatures, suffer more than we would. Let us put ourselves as far as possible in their places, and scan the subject from their standpoint. What are their wishes in the matter? If they have decided preferences, they should be consulted; for they are equal partners in the marriage relation. Their wishes and interests are too often ignored, either from selfish or puritanical motives or from sheer carelessness on our part.

It seems to me that physicians shrink unduly from this question, lest their opin-

ions should become public property, and removal of the ever-present fear of conception should open the flood-gates of immorality and indiscriminate and illegitimate intercourse. These fears, I think, are groundless, for I do not for an instant believe that the reason our girls are pure and chaste is because they dare not be otherwise lest they become mothers. If anyone has such an opinion of American girls and women, then his acquaintance with them must be very limited. Purer girls and truer and more devoted wives do not exist than come from the ranks of our countrywomen.

Physicians know as well as it can be known that motherhood is a noble mission, perhaps the noblest open to woman; but to spend life from eighteen to forty-five bearing and rearing children is not unlikely to sap the vitality of any woman, and prevent that development of mind and body, that improvement of children and of the home-life which should be the aim of every true wife and mother. Furthermore, too frequent conceptions and pregnancies are not good for the mental and physical well-being of the children. This mother with too many children has not time to devote to their rearing and culture, but her entire time is occupied with the baby just born, or about to be born. She is shut out, to a great degree, from the social intercourse which is so dear to woman; all her chances for mental improvement are cut off; the cares and worries of her condition make her irritable and petulant, and the real pleasure she takes in the society of her husband, and in the neatness and home-like atmosphere of their home is greatly lessened.

True home-life depends on the wife and mother more than on anyone else. She must make home the brightest spot on earth to her husband and children; and if she fails in this, their future prospects are not very bright. Common justice demands that she be given time to think and plan for the peace, happiness, and purity of her home. There is something sacred and holy in the married state, where two young people start out to make a new home, a place of refuge, where care and worry shall be banished as far as possible. and where these two shall truly be one. The sacred mystery of pregnancy and motherhood draws husband and wife closer together, and in their love for and interest in the life and welfare of the babe God has entrusted to their care, they draw nearer each other, and their home-life becomes brighter and purer. Their love and ambition centre around their offspring, and they are better citizens for this new responsibility. If several more are added to the number they are to rear, still they may be glad and willingly undertake their care and education.

But let us go on with our picture. Children come thick and fast, the poor mother has not one child provided for before she must prepare for another, or for twins perhaps. There is a constant succession of children, and this woman—the wife, the mother—becomes in reality a mere child-bearing machine. The home-life is devoted to caring for the babies, and the lives of the little ones are spent in tending the smaller ones. These constant burdens tell on the mother in many ways, and the father is unable to meet the expenses of such a large, ever-increasing family; so he either must live in an humbler way, or he may get more and more in debt, or in desperation, the abortionist may be called in to keep peace in the family, and the wolf from the door. Then at last the poor woman may find respite, but at what a fearful cost! with moral sense blunted, and perhaps her physical health impaired or ruined. Many otherwise happy homes are wrecked on account of too frequent maternities, and the lives of fathers and mothers rendered a burden. It is true that large families are often very happy ones; but times are changing: competition is daily growing more fierce, while expenses are piling up, and women are more sedentary and less robust than formerly, and fathers are not as capable of supporting large families, or mothers of rearing them, as in the "good old times."

My invariable practice when approached by a husband or wife in regard to the means of preventing conception has been to say: "There is a sure way: do not marry; but if you are married, sleep apart and never have sexual intercourse." I fear, however, that this chaste advice has never been followed; and as long as human nature remains unchanged, I do not think it is likely to be. Until a very recent period, I thought that a physician was not justified in giving any other advice; but now I am looking for more light on the subject. It seems to me that, even if they were instructed in regard to the methods of preventing conception with which physicians are familiar, self-respecting women would become pregnant fully as often as the welfare of themselves or their children would permit.

The Medical and Surgical Reporter for November 3 describes several methods

which are comparatively *simple and harmless.* The question as to their harmlessness is discussed there; but even if they are not perfectly harmless, I think the reader will agree with me they are far less likely to be harmful than too frequent pregnancies.

The advice of the physician on this important subject should not be indiscriminate; but in selected cases, is it not his duty to tell his patients some simple means of avoiding too frequent conception? Would not such advice conduce to the welfare and morality of those entrusted to his care? The vicious and immoral do not ask for or need this advice, for they have plenty of devices of their own; but as physicians, as humanitarians, should we withhold it from those who seem to need it very much, and denounce the prevention of conception as a crime second only to criminal abortion?

This question is daily becoming of greater importance. How shall we meet it?

Society Reports.

AMERICAN ACADEMY OF MEDICINE.

12th Annual Meeting, at New York, Tuesday, Nov. 13, 1888.

FIRST DAY, MORNING SESSION.

The President, Dr. Frederick Henry Gerrish, A.M., M.D., of Portland, Maine, in the chair.

Dr. Leartus Connor, of Detroit, Mich., read the Report of the Committee on the Requirements for Preliminary Education in Medical Colleges in the United States and Canada, and referred to the methods of determining whether or not the colleges fulfilled the statements made in their announcements. One of these was by means of decoy-letters This plan last year indicated that the majority of the colleges fulfilled their statements. Another method of judging is by a disinterested examination of the graduates, such as the examination for the army or navy. Positive data are not at present available; but in regard to these examinations the principal deficiency seems to be in the preliminary education. The general verdict of editors is that the average doctor is lamentably deficient even in what is known as common school education.

There are in the United States, 116 medical schools. According to their announcements, 89 exact certain educational requirements; but 19 of these require no more than they can help. It is futile to endeavor directly to influence medical colleges to make these requirements. They can be obtained only by awakening in the mind of the profession and people a sentiment that a definite preliminary education is necessary to the medical student.

Dr. A. L. Gihon, U. S. N., offered the following resolution, which was adopted: *Resolved:* That the American Academy of Medicine expresses its approval of the aid afforded the cause of higher medical education by the College of Physicians and Surgeons of New York, in its recent requirements for matriculation, which the Academy commends to the profession as worthy of adoption.

Dr. J. C. Wilson, of Philadelphia, read a paper on

The Causes and Prevention of the Opium Habit and Kindred Affections.

These affections are prevalent, but we possess no reliable statistics concerning their frequency. The causes may be grouped under three heads: First, Example, as shown in the case of those who become opium eaters through the example of friends. Second, Suggestion, as shown in those who fall into these habits through the reading of literature concerning it, or from familiarity with the drugs, as in the case of doctors, druggists, nurses and students of medicine. Large numbers contract the opium habit from these causes in the absence of sickness and physical pain. Third, Medical Prescriptions. It is an unfortunate fact that most of the victims of habitual vicious narcotism become so through the prolonged abuse of narcotics originally prescribed by a physician for the relief of pain.

Among the measures for the prevention of such habits, are:—First, the dissemination of a wholesome knowledge of the methods by which the opium habit and kindred affections are induced; of the serious character of these affections, and of the dangers attendant upon an ignorant and careless employment of narcotics. Second, a reasonable and temperate presentation of the facts in the popular works upon hygiene. Third, the exercise of every possible precaution on the part of physicians in prescribing narcotics. It is good practice to keep the patient in ignorance of the character of the anodyne used, and of the dose; physicians should personally control, as far as possible, the use of such drugs, and see that they are taken infrequently and in the

minimum amounts capable of producing the desired effect. The occasional alternation of anodyne medicaments is desirable. Prescriptions for drugs of this kind should not be renewed by druggists without the written order of the physician. Finally, a merely palliative treatment should not be allowed to assume too great importance in the management of curable painful affections. Under no circumstance except in the final stages of hopelessly incurable painful affections, should the hypodermic syringe be placed in the hands of the patient Uniform and efficient laws to regulate the sale of narcotic drugs are desirable Existing laws relating to this subject are a dead letter; they are neither adequate to control the evil nor is their enforcement practicable.

Dr. R. L. Sibbet, of Carlisle, Pa., thought that the physician should not tell what he is giving when he prescribes opium. He also thought that we should never write a prescription in which the word opium appears.

Dr. Leartus Connor, of Detroit, considered it unsafe for the physician to administer a narcotic in his own family He could give a large number of instances in which wives and other members of physicians' families had become addicted to the use of opium in this way. It is unsafe for the physician to administer opium to himself.

Dr. Theophilus Parvin, of Philadelphia, read a paper on the

Importance of Practical Obstetrics

in the course of instruction given by medical schools. A recent visit to Munich, where he spent some time observing the method of teaching obstetrics in the University of Bavaria, pursued by Professor Winckel, made him conscious of the great deficiencies of the American plan of obstetric instruction. The science of obstetrics is admirably taught in our medical schools, by pictures, models, illustrations of various sorts, with preparations of pelves, etc., but the vast majority of American medical students graduate without having witnessed a case of labor. In many medical schools, the diagnosis of pregnancy by auscultation and by palpation is not taught so that the graduate sees with his own eyes and feels with his own hands. There is also reason to believe that the mortality of private practice is greater than that of hospital practice. Then, too, the unqualified obstetrician contributes largely to the work of the gynecologist. Whilst attendance on poor women at their homes is better than no practice at all, yet the student will derive more benefit from the study of cases collected in a maternity hospital, where many cases can be studied under the instruction of a competent teacher. The practical teaching of obstetrics is to be directly associated with its scientific instruction. There should therefore be a maternity belonging to every medical school in which obstetrics is taught. In large cities there would be no trouble in obtaining sufficient material for this method of teaching. Through the efforts of the author, the trustees of the Jefferson Medical College authorized the establishment of a maternity department in connection with the hospital. Thirty-four women have been confined without a death. The room being insufficient, an out-door department has been established. Here there have been 151 applicants, of which number 106 have been confined, with but one death, which occurred two weeks after labor. The cause of death was not positively ascertained.

The author then described the methods employed at the Bavarian University, basing his remarks on a report furnished by Dr. J. Clifton Edgar Obstetrics is there taught by (1) didactic lectures; (2) obstetric clinics; (3) touch courses; (4) operation courses on the phantom; (5) management of labor cases; (6) bedside instruction in the puerperal wards. The student is required to attend obstetrical clinics for nine months. In this time he would, at a low average, thoroughly examine eighteen gravid or parturient women, and deliver four women.

In concluding, Dr. Parvin said: "Why would it not be wise for this Academy, which should be a light and a guide to the American profession, leading it to higher and giving it larger views on its duties and responsibilities, declare, with hearty unanimity, that practical obstetrics should be made a part of the regular course in every medical college? With the seal of your approval, those who are laboring to this end will be given strength and hope.

"May the time soon come when every medical school upon the continent, which does not take steps to make this necessary reform, shall perish under the common and condign popular and professional damnation!"

AFTERNOON SESSION.

Dr. F. H. Gerrish, of Portland, Me., delivered the

President's Address.

Reference was first made to the necessity for something more than a mere grammar-

school education as a preparation for the study of medicine. The course of a medical student without proper preliminary education was traced. Until recently any male of the human species, who could pay the necessary fees, found no difficulty in entering a medical college. A few years ago several medical schools established a preliminary examination. This was attributed by the speaker largely to the action of the Illinois State Board of Health, to the effect that if the schools wished their diplomas to be recognized in that State, they must have a preliminary examination. He thought that the labors of the Academy should be directed to the elevation of the standard of medical education, rather than to the investigation of scientific problems.

The next portion of the paper was devoted to a consideration of the methods by which the membership of the Academy could be increased.

The President then referred to certain amendments which had been proposed at previous meetings. One of the amendments considered related to Art. VIII, Sec 1, which now reads: "The Fellows of the Academy in their relations with each other and with their fellow-men, agree to be governed by the principles embodied in the present Code of Ethics of the American Medical Association, and by the Constitution and By-Laws of the Academy." The amendment suggested is: "The Fellows of the Academy will be governed by those principles which actuate educated, cultured and honorable men in every profession, and by the Constitution and By-Laws of the Academy." The speaker favored the adoption of the amendment.

Never before, he said, has it been appropriate to address the Academy as "Ladies and Gentlemen," but to-day it is my privilege to make this significant expression. It is neither creditable to our country nor in keeping with the liberality which theoretically characterizes our institutions, that a discrimination should so long have been made against women in scientific associations. It is noteworthy that some of the stanchest upholders of a strict preliminary examination, as ascertained by the detective work of our committee on the subject last year, were the schools managed by women.

Since the last meeting, several members of the Academy have died, and Dr. Gerrish spoke briefly of each deceased member.

In order to facilitate the procuring of essays for the annual meetings, it was suggested that a special committee charged with this work be appointed. In reference to the Congress of American Physicians and Surgeons, he thought it advisable for the Academy to consider the expediency of associating itself with the other societies composing the Congress, thus bringing the Academy into more prominent notice than it has hitherto enjoyed.

Dr. R Lowry Sibbet, of Carlisle, Pa., read a paper entitled:

A Few Words Concerning our Academy.

The Academy was organized in 1876, at a time when the standard of medical education was at its lowest point. Medical institutions were numerous, and their doors were thrown open to all, irrespective of qualifications. At this time there were also at least a dozen of so-called "diploma-mills." It was at this period that the Academy began to explore these novel methods of manufacturing medical practitioners. The addresses by the President and the papers by the Fellows have generally been on some semi-medical subject, and have been widely distributed among professional and educated classes. These addresses have also pointed out the true and only method by which men may become safe and honorable practitioners. The Academy has strongly insisted upon the necessity of preliminary education. At the time of the organization of the Academy, in no State were there laws relating to the practice of medicine that could be enforced. Most of the States now have laws which can be carried out, and many have State Boards of Examiners Graded courses have been adopted in the best medical schools, with preliminary examination and frequent written examinations. The "diploma-mills" no longer exist. This is the only association in which the addresses referred to could have been made, because the sentiments expressed in them were too much at variance with the sentiments of the majority of the profession.

The Academy is the only society in which an Academic qualification is required. There are three departments of activity indicated in the organic law of the Academy: 1, the reading of papers on what may be called the higher science of medicine; 2, the exposure of imperfect methods of medical education; and 3, the bringing into the Academy of eligible members of the profession. The Academy had set a high standard for admission, but he believed that the doors should not be closed against those eminent practitioners who, although they did not possess

the degree of A.B., had pursued protracted courses of preliminary study in literary schools.

Dr. George Jackson Fisher, of Sing Sing, N. Y., read a paper entitled:

The Famous Historic Masters of the Healing Art were Men of Classical Education;

in which he gave, at some length, an instructive review of the history of medicine. He then referred to the extent of medical literature, and to the necessity of being trained to study and research as a preliminary to entrance into the sacred temple of Æsculapius. He emphasized the fact that all the enduring literature of medicine, and all the substantial improvements, discoveries and progress through all time have emanated from learned and talented men; that scarcely anything is owed to the illiterate of our profession The paper concluded by urging the necessity of keeping a vigilant guard at the doors of medicine, and if possible of preventing any from entering who are not "duly and truly prepared"—any who are not possessed of kindness of heart, of good common sense, of fair ambition, and of sobriety, honesty and industry.

Dr. L. Duncan Bulkley, of New York, read the final paper, on the

Relations Between the General Practitioner and the Consultant or Specialist.

In a previous paper the author had shown that specialism is a necessary and healthy outgrowth of general medicine. The object of the present communication was to point out the reciprocal relations which should exist between the general practitioner and the consultant or specialist.

The annual banquet was held Tuesday evening.

Wednesday—Second Day.

MORNING SESSION.

Dr. Charles Carroll Lee, of New York, read a paper on

The Necessity for Post-Graduation Instruction

in the present state of American medical education.

The first Post-Graduate Medical School was opened in New York in 1882. There are now six in operation in different medical centres. These courses are attended by practitioners anxious to brush up on certain subjects. Some of the colleges strive to provide clinical instruction for medical men, but the means at their disposal are not sufficient to provide the instruction required by practitioners. The post-graduate schools are continually increasing in popularity. Here the student in any special branch is able to devote his entire time to that subject. He is also able to follow the practice of a number of experts, instead of being bound down to the methods of a single medical man. For one mature enough to observe and judge for himself, the benefit of this is obvious. It is difficult to conceive how London, Berlin or Vienna can offer greater facilities for clinical teaching than are to-day available in this city. To the medical teacher, a frequent European visit is desirable, not only to perfect his methods of instruction, but to broaden his mind; but the time has arrived when, if the American teacher of medicine does his whole duty, the American student should lack no practical knowledge of his profession.

Dr. Henry I. Bowditch, of Boston, presented a paper entitled:

Tolerance and Intolerance in Medicine; Codes of Ethics.

What code of ethics should the Academy adopt? The author took the ground that tolerance and intolerance are two great moral forces in the world at large, and that in the line of resultant of these two powers, the world has been and will be forever carried forward. History shows how these forces at times have actually changed places, and made vice appear to be virtue. Hence they must be used cautiously and understandingly. Turning to medicine, he found that intolerance had almost invariably been ready to oppose any new idea. Ambroise Paré, Jenner, etherization and Morton, thoracentesis by Wyman's method, were brought forward as examples of the truth of the above statement. Tolerance has, however, always come to the rescue.

The author next referred to the American Medical Association and to his great interest in it in its early days, and spoke of the gradually developing tyranny of its "Code." He called attention to the action of the American Medical Association last year, preparatory to voting that no signature to codes should be required hereafter. The expulsion of the New York State Society was spoken of. In this connection he referred to Homœopathy and Eclecticism, and expressed freely his disgust at the tyranny exhibited at the time of the expulsion of the Homœopathists from the Massa-

chusetts Medical Society. He gave his testimony, from personal knowledge of some members of these two sects, as to the integrity and intelligence of some homœopathists. He advanced the opinion that the Academy will not recover its just position until it rescinds the vote adopting the Code of Ethics. He asserted that the only true code, viz.: "that of the gentleman," is the Golden Rule of "doing unto others as you would have them do to you."

He concluded with the following words: "Gentlemen of the Academy! if all of us would make that divine rule the guide of our professional relations, tolerance and intolerance would join hands in peace; and this Academy, if it could induce all physicians to act upon it, would have accomplished one of its highest missions. God grant that this body may, with each year of its growth, by the work of its individual members and by its own joint labors, tend to bring the whole profession of America up to higher grades of thought, of sentiment and of action, so that we may at length really become what we have hitherto but with unconscious falsehood claimed to be, a truly liberal profession."

Dr. Charles McIntire, of Easton, Pa., read a paper entitled:

Which is the Liberal School?

The author had been led to write the paper by a letter received from a homœopathist, who was in other respects qualified for admission to the membership of the Academy. The question was: Does that branch of legally qualified practitioners of medicine, self-called regulars, show illiberality in its professed rule of non-intercourse with any branch that professes to hold any exclusive dogma? Or is the illiberality shown by those who profess to believe in an exclusive dogma, while they have given up its practice? The author concluded that the illiberality is shown by the latter class.

The consideration of the following amendment to the Constitution was taken up: "The Fellows of the Academy will be governed by those principles which actuate educated and honorable men in every profession, and by the Constitution and By-Laws of the Academy."

After a prolonged discussion, the amendment was laid on the table for one year.

The following resolution was presented by the Council and adopted: "That the Academy heartily endorses the suggestion of Dr. Parvin, that practical obstetrics should be made a part of the regular course in every medical college."

Dr. Charles C. Bombaugh, of Baltimore, read a paper on the

Multiplication of Useless Drugs.

The old polypharmacy was first contrasted with the greater simplicity in framing prescriptions which prevails in our day. In the earlier days there was a sublime disregard of compatibility. What made the farrago worse, were the crude and often repulsive forms in which ingredients were presented, so different from the active principles and elegant preparations to which we are accustomed. He then referred to a variety of interesting considerations connecting past experience with present progress.

In dealing with his subject, the author referred to the continually increasing unwieldiness of the U. S. Dispensatory. The index of the fifteenth edition extends through 76 three-columned pages. embracing about seventeen thousand names of medicinal substances. Deducting one-third—a liberal allowance—for repetitions, there are, in round numbers, eleven thousand. Of this number, he thought that ten thousand could be transferred to the *Index Expurgatorius*, without being seriously missed. Of the 324 constituting the primary list, it has been shown that 108 (one-third) are very active; 100 frequently do their work; and 116 are untrustworthy. In this connection, reference was made to the very limited number of remedies deemed worthy of classification in Dr. Wood's Therapeutics. In the sixteenth edition of the Dispensatory, there is an addition of fifteen pages to the index—a total of ninety-one pages. The editors intimate that they have discarded some of the material they considered "effete," so that, although they added 600 pages, the net increase was only 167 pages. As it is time to commence the discarding process and throw overboard the rubbish, this preliminary rejection is most welcome. There is an irruption of newly discovered medicines and newly devised combinations, which demands arrest. The only ground for tolerance is that now and then one comes to stay with the stamp of authoritative approval.

Dr. Bombaugh spoke of the declining sovereignty of empirical conclusions and the coming reign of pharmacology, which is concerned with the action of drugs on the healthy body. The time has come for dependence upon experiments with medicinal agents upon animals. Among the reasons

for hastening the coming revolution is increasing recourse to remedial measures other than the administration of drugs. More and more reliance is placed by the practitioner upon such agencies as the electric current, massage, dietetics, treatment of systemic conditions or diatheses, germicides, antiseptics, disinfectants, sanitation or State medicine, prophylaxis or preventive medicine; but while we are grateful for these acquisitions, and while we welcome additional contributions to a list of positive medicines which is conspicuous for insufficiency, let that gratitude and that welcome be a standing protest against mere numerical preponderance.

Dr. H. A. Johnson, of Chicago, read a paper on the

Influence Upon Medical Education of the Illinois Medical Practice Act.

The Illinois State Board of Health was created in 1877. One of the first acts was the passage of a resolution that the diploma of a college graduating two classes in one year would not be considered in good standing after July 1, 1878. This compelled some of the prolific schools to adopt a single graduating term. In 1880 the Board made a comprehensive study of requirements of medical schools. In 1884 the Board adopted a schedule of the minimum requirements for graduation in the State of Illinois. This has led to an increase in qualifications required by many of the schools. There are now 114 colleges which require evidence of preliminary study as a condition of admission. In 1883 there were only 43. Forty-three colleges now exact a three-year course, as compared with 22 in 1883. The Board has now adopted the following resolution defining the phrase "Medical Colleges in good standing" to mean "only those colleges which shall, after the sessions of 1890–91, require four years of professional study, including any time spent with a preceptor, and three regular courses of lectures, as conditions of graduation; and shall otherwise conform to the schedule of Minimum Requirements heretofore adopted by the Board."

One of the principal causes of efficiency of the Illinois Board is the fact that it is a "mixed" board. At this time the numbers who gain access to our ranks are not so numerous, but they are better qualified; and there are, therefore, not so many inferior men to struggle for existence. The percentage of graduates to students is lower, which means a higher standard of attainments.

The following papers were read by title: The Treatment of Uterine Disease by other than Surgical Means, by Dr. W. F. Waugh, of Philadelphia; The Evils of a Medical Dialect separated Widely from Classical English, by Dr. Edmund Andrews, of Chicago, Illinois.

Ninety-eight new members were then elected.

The following Honorary Members were elected: Dr. J. H. Rauch, Springfield, Ill.; Sir Joseph Lister, London; Sir Spencer Wells, London; J. Lucas Championnière, Paris; Dr. H. P. Didama, Syracuse, N. Y.

Officers for ensuing year: *President*, Dr. Leartus Connor, Detroit; *Vice-Presidents*, Drs. Peter D. Keyser, Philadelphia; L. Duncan Bulkley, New York; Theophilus Parvin, Philadelphia; George J. Fisher, Sing Sing, N. Y.; *Secretary and Treasurer*, Dr. Richard J. Dunglison, Philadelphia; *Assistant Secretary*, Dr. Charles McIntire, Jr., Easton, Pa.

Place of next meeting, Chicago, Illinois.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday, November 1, 1888.

Dr. T. M. Drysdale in the chair.

Dr. L. J Hammond reported a case of

Pyosalpinx.

N. J., 22 years old, had one child three years ago. Since that time she has not felt well, has had frequent attacks of pain in the pelvic region, confining her to bed for weeks at a time. About nine months ago she had a hemorrhage from the uterus lasting three weeks, and followed by a purulent discharge, accompanied with severe pain and great tenderness of the abdomen, especially low down, obliging her to remain in bed two weeks. After this time she resumed her occupation, that of a laundress, until four weeks ago, when the pain became so intense that she was again obliged to go to bed, where she remained one week without medical attendance. At this time I found her with a temperature of 100°, pulse of 120, abdomen tympanitic and so very tender that she could not bear the weight of my hand upon it; she also had menorrhagia. Digital examination was deferred until the next day, owing to the great distention of the bowel with feces, which naturally increased the pain. Upon examination per vaginam, I found a uterus very much enlarged and bound down firmly posteriorly,

together with a large boggy mass on the right side, which was very sensitive to touch. An immediate operation was advised, but was delayed, owing to the absence of relatives, until Oct. 18, when, with the assistance of Dr. J. M. Baldy, the abdominal cavity was opened and a large abscess, with pyosalpinx, was removed from the right side. Great difficulty was experienced owing to extensive adhesions. Several small pus-pockets were ruptured during the removal, and about an ounce of pus was discharged. The left ovary was not removed, it being apparently healthy. After thorough irrigation a glass drainage-tube was inserted, and was replaced on the fourth day by a rubber one, which was removed in 26 hours. It is to-day just two weeks since the operation and the patient is well. At no time did the temperature rise above 99°½

Dr. J. M. Baldy said that it had been stated in the Society by a member that he had never seen pus in a tube primarily. The specimen presented was interesting in that connection, as there had been pus in the tube as a primary condition. There was not pus present then, as the specimen had been cut open and had been for a long time in alcohol. There were two sacs in the ovary; one contained pus, and the other a blood clot as large as a walnut.

Dr. M. Price, in answer to a question whether the matter contained in these abscesses was really pus or not, said there could be no question but that it was pus. He was quite sure that it had been examined under the microscope.

Dr. B. F. Baer thought that he was the culprit referred to by Dr. Baldy. In the discussion of this subject before the Society, last winter, he was reported as having made the above statement; but he had been misunderstood. What he really did say was that, in his experience, primary pyosalpinx was a rare disease; that in the uterine appendages which he had removed, the condition was an inflammatory one, involving the tubes, ovaries and pelvic peritoneum, which had resulted in gluing or matting together the organs; but that he had failed to find pus contained in the tubes and nowhere else; that in the pus cases with which he had met, there was a condition of abscess in which it was difficult to tell whether the disease had originated in the tube, in the peritoneum, or in the cellular tissue, so extensive was the destruction of the tissues and organs in these cases. It would be a very sweeping statement to say that primary pyosalpinx never occurred, and he did not wish to be misunderstood as making it. His experience during the past year confirms the views which he then expressed.

Dr. Hammond said there was no question about there being pus in this tube. The tube was larger than his thumb and thoroughly distended with pus.

Dr. George Boyd exhibited a

Multilocular Ovarian Cyst.

The ovarian cyst which I have to show in connection with the short history of its growth, I think is of some interest.

Mrs. D., 27 years old, primipara. I was called to see her early last July. I found her advanced in pregnancy. She seemed well, with the exception of the fact that both legs were œdematous. This had caused her some alarm. The urine, on analysis, being excluded as a cause of this swelling, it was attributed to venous obstruction by pressure. She fell in labor Aug. 7, and, with an easy delivery, gave birth to a female infant weighing 8 pounds. I applied the binder, as is always my custom. The uterus was well contracted and its outline regular. There was no evidence of any tumor. On the eleventh day, she was out of bed and about, doing her household duties, feeling well, although the lochia was greater than it should have been. At the expiration of two weeks I left her doing nicely. Sept. 19, about three weeks after my last visit, I was called again to see her. She stated that she was losing blood and also that the stomach was swollen. She complained of pain in the left ovarian region. An examination showed a tumor the size of the uterus at the third month of gestation. It occupied nearly a central position, more to the right of the median line, on the opposite side from where she complained of pain. In three weeks more it had attained twice the size and showed marked fluctuation. Dr. Noble saw the case with me, and together, after a careful examination, we diagnosticated a thin-walled cyst (ovarian or ligamentary). It continued to increase in size very rapidly, and now was above the umbilicus. The pain she complained of was growing more severe, and she was losing flesh. Oct. 18, a little more than two months from her lying-in, with the assistance of Drs. Kelly and Robb, I removed the growth. The operation was of no unusual interest. The cyst was tapped and delivered; there being no adhesions and the tumor having a good pedicle, it was easily removed. It sprang from the right ovary. The patient has made a good recovery. Her temperature

was at no time higher than 99° Fahr. So little was the shock that at the end of the first week, the baby, which had been nursing, was returned to the breast. The points of interest in the case are these: first, an ovarian tumor, not complicating labor; second, the operation performed during lactation; third, an ovarian cyst containing nearly a gallon of fluid, still remaining unilocular.

Dr. William Goodell gave the history of a case of

Double Intra-ligamentary Cysts.

The woman, 30 years old, had been infected with syphilis, from which she had suffered with constitutional symptoms. Two tumors had been discovered a year ago. Her health had failed rapidly, and œdema of the upper and lower extremities was present. The womb was so closely adherent to the tumors, and they were so immovable, that a diagnosis of one multilocular intra-ligamentary cyst was made. At the operation, performed at his private infirmary, Oct. 15, an intra ligamentary cyst of each ovary was discovered, which demanded long and difficult enucleation. They were both extirpated without leaving a pedicle behind. The broad-ligament capsules being thin, were torn in shreds. These were trimmed and tied, and many bleeding vessels were secured. Deeply seated oozing, from vessels which could not be reached, was thought to have been controlled by Monsel's Solution. Two other small cysts were now discovered, apparently wholly independent of the ovarian cysts. As they were too deeply seated and too adherent to the rectum on one side and the cæcum on the other, they were not removed, but were freely incised and cleansed. Many intestinal adhesions had also to be severed in the removal of the larger cysts, which weighed, approximately, ten pounds on the left side and five on the right side. After careful and repeated flushings of the abdominal cavity, a large drainage-tube was put in. Within two hours, serious hemorrhage took place and much blood escaped from one of the tubes; but as it gradually grew less the wound was not reopened, and in twelve hours it ceased. Five days after the operation, when Dr. Goodell was about to take out the tube, high fever set in, preceded by chills, and the tube was therefore not removed. On the next day, a deep-seated abscess burst and its fetid contents escaped through the tube, poisoning the air of a large room for several days. Later a rubber drainage-tube was inserted. Two weeks and a half have now elapsed since the operation, and the woman is doing well; that is to say, her temperature and pulse are natural, and the abscess has nearly healed up; but her convalescence is retarded by a diarrhœa of long standing, which he attributes to specific disease of the intestines, for which he is giving iodide of potash. He has never heard of a surgeon being infected by syphilitic virus during the performance of ovariotomy, yet he did not see why such an untoward result might not happen; so, during and after the operation, he was careful to cleanse his hands thoroughly and separately with a sublimate solution. Indeed, for several days after the operation, he was quite uneasy about himself, lest he had been inoculated.

Dr. Goodell also showed the left ovary of a young girl, 22 years old, which he had removed and which had two pus-cavities in it. No history of peritonitis could be elicited, yet the pelvic cavity was crossed and recrossed with bands of adhesion as tense as fiddle-strings. Many of these pelvic bands and other close adhesions of the ovary proper had to be broken during the operation. The right ovary could not be discovered anywhere, although very careful search was made both by Dr. Goodell and Dr. W. L. Taylor; and although the pelvic floor was pushed up by the hand introduced into the vagina. A small body as large as a bean, which was possibly a rudimentary ovary, was felt in the right broad ligament; but it was so obscured by organized exudation and fastened down by adhesions, that no effort to remove it was deemed proper. All the pain was referred by the girl to the left ovary. Dr. Goodell thought that in this case the lesions had come from some exanthematous disease of childhood, or from latent peritonitis, just as adhesion-bands are often found in the pleura, when no history of pleurisy can be found. The girl in this case was a virgin, and he felt very confident that gonorrhœal infection could be excluded. Owing to a constant oozing of blood, the drainage-tube was kept in for eleven days, a rubber one being substituted for the glass one at the end of the first week. Not any complications have retarded her convalescence.

Dr. B. F. Baer presented a specimen of

Broad-Ligament Cyst,

removed by enucleation, which had been tapped seven times in seven years.

Miss A. was sent to him by his friend, Dr. S. S. Smith, of Driftwood, Pa., and entered

his private infirmary on Oct. 3. She is single; 44 years of age; had enjoyed good health until eight years ago, when she found that her abdomen was increasing in size. She also complained of a peculiar pain, "pulling down in the pelvis," as she called it. Her abdomen continued to increase in size, until she had such difficulty in breathing that she could not walk upstairs without suffering great dyspnœa. She was tapped on Aug. 2, 1882, and four gallons of fluid, "as clear as spring-water," were removed. She does not think that she lost any flesh during the early development of the tumor. In nine months she was tapped again, and three gallons of fluid removed. Between the first and second tappings she lost considerable flesh. At about the same interval she was tapped again, and three gallons of fluid removed. She was tapped yearly since Aug. 2, 1882—seven times in all—the last tapping occurring in April of this year.

Two or three years ago she began to flow more freely at her periods, until they became so profuse that she would flow as long as a month at a time. About the same time she noticed that there was a projection from the vulvar orifice which would become larger if she were on her feet and retained her water, and diminished in size after the bladder was empty. She presents an appearance of considerable emaciation, and states that she is rapidly losing strength. Inspection shows the abdomen to be symmetrically distended to the extent seen in the sixth month of gestation. The abdominal wall is very loose and flaccid. There is a circular scar midway between the umbilicus and pubes; and on questioning the patient, she explains that four years before she had a "running sore," which continued about two years. The suppuration followed one of the tappings and took place from the puncture. Palpation of the abdomen shows a loose thin-walled cyst in the cavity, which does not seem to be adherent to the abdominal wall; fluctuation is marked. Inspection of the vulvar orifice shows a cystocele, about the size of a duck's egg, and also an inflammatory swelling of the left labium majus. The vaginal touch shows the cervix to be near the orifice of the vagina, and to be quite small. The lower part of the tumor is felt very distinctly posteriorly, and low down in the pelvis. The uterus is pushed forward and to the right and occupies a position out of the pelvis above the right groin. The sound passes through the centre of the body last described to the depth of four inches, and shows it to be positively the uterus. The tumor appeared to have pelvic attachments below the uterus as though it might be an intra-ligamentous cyst

Operation October 6, in the presence of Drs. T. M. Drysdale and Charles P. Noble; and I was kindly assisted by Drs. J. M. Baldy and J. S. Baer. The incision was two inches in length. When the tumor was exposed to view it was found to be firmly adherent, in several places, to the anterior abdominal wall and to the point opposite the scar that was the seat of the former suppurating, fistulous opening; it was found that the fimbriated extremity of the Fallopian tube formed this latter attachment. It was this attachment of the extremity of the tube, which had probably caused the elevation of the womb, as that organ seemed to be suspended from the point noted—the Fallopian tube extending from this point downward over the tumor to the uterus, forming a portion of the wall of the tumor. It was also noticed that the outer and upper wall of the tumor was apparently closely adherent to the intestines—so closely indeed that it was necessary carefully to select a place where puncture could be made without wounding the bowel. About two gallons of thin fluid, rather straw-colored, was evacuated, when the cyst entirely collapsed. On attempting to draw it out it was found to be so deeply attached that it could not be withdrawn. The upper portion of the cyst wall seemed to consist entirely of the intestines, which escaped through the incision when traction was made upon the cyst. They were hurriedly returned, and the fingers carried downward toward the base of the tumor, when it was found that the entire pelvic peritoneum of the left side was lifted up—that is, the tumor was entirely subperitoneal and without a pedicle. A condition now presented itself which renders this case one of extreme interest. The base of the tumor was so broad, vascular and so closely attached to the intestines, that to have begun to enucleate below would have been hazardous on account of the danger of rupturing the bowel, as well as of hemorrhage, which would probably have been great from the opening of large blood-vessels. We determined that it would be best in this case to begin to enucleate at the point of puncture of the trocar; and it was found, much to our satisfaction, that the cyst was readily separated from its outer or peritoneal coat. So readily was this done that it was unnecessary to ligate a single blood-vessel, and the enucleation was finished within ten minutes. After the enucleation was com-

pleted, the entire peritoneal covering collapsed and disappeared. It contracted so quickly indeed as to make it difficult for me to find its cavity for the purpose of irrigation, which was next done. The thick Fallopian tube was next ligated and cut away; but the tumor itself was entirely without a pedicle, and was monocystic, as you will see in this beautiful specimen. After irrigating, the wound was closed around a small drainage-tube and the patient returned to bed, showing some evidence of shock from the operation, from which, however, she soon rallied. The drainage-tube was removed within 36 hours, and the patient has recovered. During the third and fourth days, the urine was found to contain pus and blood; but on investigation it was found that these probably originated from a former cystitis. The bladder was washed out twice daily with carbolized water, and she soon recovered from this condition.

In my experience this case is unique. The cases of broad-ligament cysts, requiring enucleation, with which I have met, have been of such character as to require the application of many ligatures and pressure forceps to control the hemorrhage during enucleation. Whether this is because I formerly began to enucleate near the base of the tumor, by breaking through the outer covering, or because it is seldom that we meet with a tumor so easily enucleated as this one was, I do not know; but I lean rather to the latter view. My experience with this case, however, will lead me to endeavor, in future, to begin the enucleation high up, at the top and less vascular part of the cyst wall. It was long ago pointed out by Bantock that in broad-ligament or par-ovarian cysts the peritoneal covering could be readily separated from the cyst proper. This served to distinguish it from the cyst of the ovary, the outer wall of which cannot be separated from the covering beneath it. While this was an intra-ligamentary cyst, it was not that form of cyst which is described by Doran as originating in the hilum of the ovary and containing papillary growths, several specimens of which I have exhibited to this Society.

Dr. B. C. Hirst showed an

Intra-Ligamentous Cyst.

This specimen was recently removed by an operation performed by Dr. T. H. Bradford, at which I had the pleasure of assisting. The tumor sprang from the right broad ligament and was attached deep down in the pelvis. Its blood-vessels were enormous. It was covered by that curious muscular-looking capsule which makes these tumors resemble an enlarged uterus. There was furious hemorrhage at the lower attachment, when an attempt was made to ligate the pedicle. This was only controlled by a long pair of catch-forceps passed in the dark. The entire tumor was removed and the stump cauterized. The operation lasted over three hours and the woman almost died on the table. She recovered from the immediate effects of the operation, but died three days later. The mass consists of a papillary growth internally, and a capsule which shows a feature referred to by Dr. Goodell at a meeting of the Society last December, and that is, the seeming rottenness of the tumor-wall in spots which makes it exceedingly difficult to remove these growths without tearing them and allowing some of their contents to escape into the peritoneal cavity. This happened in the present case. Had the woman lived, it is probable that the peritoneal surface would have been infected by this papillomatous matter.

In opening the discussion on the papers read, Dr. R. P. Harris mentioned the case of the late Dr. Emeline Cleveland who had become infected from an ovariotomy and had a syphilitic sore develop on her wrist, which ultimately was the cause of her death.

Dr. Joseph Price said the case reported by Dr. Goodell illustrated beautifully the primary and the secondary value of the tube—the signal of hemorrhage and the cure of the abscess which formed later. The woman would have perished from the hemorrhage or the abscess had the tube not been used. In regard to the virulence of living pus, he might say that he had twice been poisoned in abdominal work. Virchow had called attention, long since, to the virulence of living pus. He differed entirely from Dr. Baer as regarded the nature of the cyst which he had presented. It was clearly a par-ovarian cyst. It belonged to that class of tumors to which are applied the minor methods of treatment without knowing exactly what the tumor was. In this case the capsule may be stripped off, and a cyst still be left. This could have been done more readily if the specimen were a recent one. The other day, he removed an enormous par-ovarian cyst and in a few minutes was able to convert it into two cysts. Such tumors are always par-ovarian, and the enucleation is easy.

Dr. Baer said he had already separated

the two coats of the cyst. He would confess frankly that after reading Doran and other authors on this subject, he did not yet exactly understand the difference between these tumors.

Dr. Slocum asked Dr. Goodell what, in his opinion, was the origin of the two cysts in his case.

Dr. George E. Shoemaker thought that in using the bichloride solution to wash out incised and punctured wounds, that it did not penetrate deeply. He would hesitate to place dependence on it unless the wound was large enough for free irrigation, and unless the solution was strong. A solution made of alcohol and bichloride was the best, as the solution would penetrate to all depths. The bleeding should be encouraged and the wound should be enlarged.

Dr. H. A. Kelly thought that Dr. Baer had developed an interesting point in not using any ligatures. He had himself operated in four or five cases in which no tying was required. One of his cases was a pus-sac and a small ovarian cyst. After enucleating the mass, nothing but oozing points were left. He attributed this to the fact, to which he had before called attention, that after adhesions had formed, the original blood-source had withered away and the mass was supplied by blood from the surrounding parts. In the case of another cyst closely resembling this, he had to use a greater number of ligatures than he had ever before used. Every point seemed to bleed and required separate ligature. This case was drained, and the patient recovered after a pus-sac had been opened from the vagina. He now seldom used a drainage-tube—never where he could avoid it. He did not fear clean blood and clean fluid if not in too great quantity. He had had no trouble for a time in his hospital, since he had adopted this method.

Dr. J. M. Baldy called attention to a point mentioned by Dr. Baer, who had stated that the Fallopian tube was attached near the umbilicus at the point of a scar produced by one of the tapping punctures. This is another illustration of the dangers which all now realize. The tube had been perforated by the aspirator and had become attached to the abdominal wall near the umbilicus. It had here discharged pus for a long time. The fistula which had been left could not be accounted for until the operation. The result of this accident might easily have been most disastrous.

Dr. William Goodell remarked that in reply to the question what the other cysts were, he must confess that he could not explain them satisfactorily. Their presence was something new to him. Whether or not they were due to the syphilitic element he was unable to say. He knew that one was wholly independent of the other two cysts. He was not so sure of the second. He was disposed to attribute the abscess to one of these cysts taking on inflammatory action subsequently. With reference to the distinction between par-ovarian and broad-ligament cysts, he must confess that he had labored under the same difficulties that Dr. Baer had. The term broad-ligament cyst is a generic one, for there are differences in broad-ligament cysts. In a par-ovarian cyst the two layers can be readily stripped from one another. In an ovarian cyst, on the other hand, every escaping Graafian follicle has caused a scar which rivets the two tissues together, so that in such a cyst the two layers cannot be separated. Of broad-ligament cysts we have two typical varieties: one, the true intra-ligamentary cyst, usually containing papillary growths and attributed by Doran to the hilum of the ovary; the other, of which he thought Dr. Baer's specimen was an illustration, is a cyst starting from the horizontal or vertical tubes of the par-ovarium. These are very beautiful translucent cysts, over which the fimbriæ of the Fallopian tube run and spread like the fronds of sea-weed. They also contain a limpid fluid. A third broad-ligament cyst is the hydatid of Morgagni. There are other cysts to which Doran has referred, but he did not understand fully his description and he thought that Doran himself does not clearly understand them, from his description. Others describe other broad-ligament cysts. They assert that cysts will form here as elsewhere. For instance, we have retention cysts in the labia from enlargement of the glands of Duverney, and we have other cysts not connected with this gland. These are attributed by some to serous accumulations in the interspaces of areolar tissue. In order to simplify matters, he divides these cysts into two sets: the true par-ovarian cysts and the true intra-ligamentary cysts, liable to contain papilloma. These intra-ligamentary cysts try him more than any other kind; the deep and tedious enucleation and the spouting vessels beyond reach make anxious work. The adhesions also obscure the land-marks and are very perplexing. About five weeks ago he tackled one of these cysts, and in endeavoring to enucleate it he tore a hole in the bladder, into which three fingers could be

introduced. The same accident happened to him several years ago, before he had ever heard of an intra-ligamentary cyst. Both cases, fortunately, recovered. He sewed up the wound in the bladder, in this last case, with a continuous cat-gut suture. He then took the portion of broad ligament which had been stripped up and united that over the bladder, so that he had two sets of sutures, like the Czerny-Lembert suture in wounds of the intestine. He introduced a self-retaining catheter and there was no further trouble, except that the eyes of the instrument at first became clogged by the blood in the bladder. In the former case a good deal of blood accumulated in the bladder. This he was able to dislodge by injecting a solution of pepsine, which seemed to digest and break up the clots.

(*To be continued.*)

Reports of Clinics.

BELLEVUE HOSPITAL.

MEDICAL CLINIC—PROF. JANEWAY.

Hæmothorax.

Case I.—The patient was a man, 46 years old. His father died of phthisis, his mother of old age. His previous history is good; he has not had syphilis, but has had attacks of "cold" several times; he is a moderate drinker. His present trouble began three weeks ago, with pain in the left side of the chest, cough, and some shortness of breath. He has had since then, on several occasions, chills, fevers, and sweats. He has been in the Hospital only two days. His temperature has varied from 98°.6 to 100°¾; the pulse, from 70 to 104; the respirations, from 24 to 28. Yesterday (Nov. 1), while a physical examination of his chest was being made, he fell over in a clonic convulsion, during which he became pale. The convulsion lasted about five minutes. On questioning, the patient admits having suffered from somewhat similar attacks, which he calls "faintness," during the last twenty years. He would usually, he says, lose consciousness during them.

Examining the patient to-day, he is noticed to be markedly anæmic. This paleness he has himself observed for some months. The heart beat is indistinct; the cardiac dulness normal; there is a faint systolic murmur at the base, which is, in all probability, hæmic. On setting the patient up there is noticed some œdema of the back. By percussion, the right side is found to be flat from the angle of the scapula down. This line of flatness is at least three inches higher in the axillary line, but at the same level in front as behind. The respiratory murmur and voice are absent in this location. The line of flatness varies somewhat with the position of the patient. Above this line the respiratory murmur is good. During the last few days, the patient has complained of pain in the left side. Examination reveals, low down, a narrow area of flatness and loss of respiratory and vocal sounds. These physical signs in the left side were not present yesterday; and on the right side were one and one-half inches lower down. Examination of the urine gives negative results.

This patient, then, is suffering from an accumulation of fluid in the chest. To determine what it is, an aspirator-needle will be introduced. In the left side, no fluid is found; from the right side, some dark-colored, thick blood is withdrawn. It will be noticed that it is blood, and not bloody serum. This procedure was undertaken yesterday, and the House Physician tells me that this fluid, examined microscopically, is found filled with many red blood corpuscles; it contains no pus. This patient has hæmothorax. The question arises, had he pleurisy first, or had he the hemorrhage first and the inflammation secondarily? This cannot be decided positively, as the patient has not been under observation since the beginning, and the history is not clear.

Now, what is likely to have been the cause of the hæmothorax in this case? Very little upon this disease will be found in the text-books. We will therefore carefully go over the causes that may give rise to this affection, and apply them to this case. First among these, is a giving way of the lung, from hemorrhagic infarction, gangrene or abscess. Here we would expect to find pneumo-hydrothorax. We have seen, however, that this patient has a good respiratory murmur in the upper part of his chest; we can therefore exclude pneumothorax. Next, the cause might be traumatism. This is the most frequent cause of hæmothorax. By a careful questioning we are able to exclude this also: he has had no fall and no injury. Scurvy is another cause. The patient's gums are not ulcerated, and are healthy-looking; no purpuric spots are found on his body; this cause also can be excluded. Again, hemorrhage into the pleural cavity may occur from the giving way of a varicose

vein (which is very rare), or the giving way of an aneurism. These cases are likely to die at once; it is not at all probable, therefore, that the bleeding would occur as slowly as it has in this patient. Moreover, there are no signs of aneurism to be found along the spinal column by percussion or auscultation; and there is no bulging of the chest wall, as almost always takes place, and is indeed the chief sign. Another cause of pleural hemorrhage is tubercle or cancer. Tubercular pleurisy is especially liable to be hemorrhagic in a patient as anæmic as this one. There are no signs of phthisis, and no history of cancer. Hemorrhagic diathesis may also be excluded by the history of the patient. Still another cause of this condition is the rupture of a small vessel, possibly constricted, during a convulsion.

Dr. Janeway was inclined to consider the patient's fainting attacks as attacks of *petit mal.* The man denies that he has ever had convulsions or twitchings, or that he has ever bitten his tongue in these seizures; yet these fits of unconsciousness have occurred for as long as twenty years, and with more or less regularity and frequency. The cause of the hæmothorax in this instance is, of course, doubtful; Dr. Janeway inclined to the view that it proceeded from a rupture of a small vessel during a fit. The fact that yesterday he had such an attack, and to-day the amount of blood is increased, adds to the probability of this view.

Rheumatoid Arthritis—Gout.

Prof. Janeway next presented two patients illustrating the different appearances between rheumatoid arthritis and gout. Both were men; one was 27 years old, the other 65. One had been sick two years; the other thirty-four years. One had several joints of the hands red, swollen and still painful, and showing some considerable effusion (which may or may not take place in these cases), and in others partial anchylosis; the other patient had bird-claw hands and showed other joints swollen from hard deposits in them, and subluxated and movable. This patient also had deposits of urate of soda in the ears, along the tendons (principally in the leg) and under the skin in many locations. There was also characteristic crepitation in the knee, when that joint was moved. [This case of gout has improved during the past year. His deposits are less than they were. It might be interesting to know that he has taken, during this time, a diet of milk, eggs, and potatoes, and almost no meat.] Dr. Janeway called attention to the fact that rheumatic arthritis is to be distinguished from gout by the absence of gouty history and by the persistence of the disease. It remains in a joint after once attacking it, and later other joints may be involved in the same manner. Another point of distinction is the occurrence of anchylosis in the former.

Cirrhosis of Liver.

Case IV.—The patient was a man, 42 years old, a hard drinker: he has averaged a pint of whiskey daily for the last fifteen years. He has suffered from stomach symptoms for some years. Five years ago he had jaundice, which has persisted, more or less, up to the present time. He has now been sick in bed for two months. He grew emaciated, weak, had vomiting, and jaundice increased. He also had cough, with salty expectoration; but no fever and no sweats. His stools are yellow—not white. Be careful, said Dr. Janeway, in these cases, not to let the patient mix the feces with the urine; the urine being loaded with bile will stain the feces superficially. Have each passed in a separate vessel.

Examination reveals a fulness in the epigastrium and right hypochondrium, which swelling moves with the respiration and is of firm resistance. It has a sharp edge and two notches can be felt. By percussion, the upper limit is found about at the normal situation; the lower edge is four or five inches below the free border of the ribs. It feels smooth and is a uniform enlargement. The diagnosis is hypertrophic cirrhosis—not cancer and not waxy liver. The jaundice is not complete, and it comes and goes. There is no history of long suppuration, or other common cause of waxy liver, and some enlargement of the spleen is found—which is likely to accompany these cases of cirrhosis.

—Three cases of yellow fever are reported at Ellaville, Fla.

—A son of Dr. S. Fleet Spier, a prominent Brooklyn physician, was attacked by diphtheria some time ago, but recovered with careful nursing. His father took him, November 9, to the temporary headquarters of the Long Island Gun Club in New Suffolk. Two days later young Spier went out for a walk before breakfast. Half an hour later a boy brought word that he had seen a young man fall down in the road. Dr. Spier was quickly guided to the spot, where he found his son dead from an attack of heart disease.

Foreign Correspondence.

LETTER FROM BERLIN.

Primary Sarcoma of the Pancreas.—Phthisis of the Stomach.—Bacillus of Whooping-Cough.—Amputating the Wrong Leg.—Sir Morell Mackenzie and Prof. Bergmann.—University of Berlin.

Berlin, Oct. 26, 1888.

A truly unique case—primary sarcoma of the pancreas, was presented this week to the *Verein für innere Medicin* by Dr. Litten. When the patient, a boy four years of age, was first examined by the physician, no symptoms could be elicited except some occasional relaxation of the bowels and pain on pressure in the abdomen. Two weeks later the boy presented an enormous emaciation, although his bodily weight had increased eight or ten pounds. The abdomen showed, even on superficial inspection, a well circumscribed tumor with hard borders and nodes. The rapid emaciation and enormous growth indicated a malignant neoplasm, the true character of which could not be defined during life, although it was taken for a cancer of the kidney, as this form of malignant growth is not infrequent in children. The boy died in a few days, and the autopsy revealed a cancerous growth of the pancreas, filling out the entire abdominal cavity. The tumor, on microscopic examination, was found to consist of small cells. The case is quite noteworthy, as no primary cancer of the pancreas has hitherto been described in medical literature.

At the same meeting, Dr. G. Meyer presented some rare pathological preparations, of which those showing phthisis of the stomach invited general attention. Meyer proposed this name for those conditions of the mucous membrane of the stomach which have hitherto been termed atrophy of the stomach. The specimens in question showed distinctly the transition from chronic inflammation of the mucous membrane to phthisical degeneration and the mucous infiltration of the glandular cells leading to phthisis of the pylorus.

Your correspondent has just perused an important study in the domain of bacteriological pathology, viz., the researches of Dr. Afanassiew on The Etiology and Clinical Bacteriology of Whooping-Cough The results of this experimenter's labors are of vital significance, for there is no doubt that he has succeeded in isolating the specific bacillus of whooping-cough. The author's conclusions can be conveniently epitomized as follows: 1. The sputum of all patients affected with pertussis contains a fine, short bacillus, which differs from other microörganisms in morphological and biological respects. 2. This bacillus has a pathogenic character; for, by injections of it into the larynx or lungs of dogs, the symptoms of pertussis can be provoked. 3. The bacillus is found in the infected animals in the mucous membrane of the respiratory passages. 4. In children who die of pertussis the bacillus can be found in the lungs and in the mucous membrane of the respiratory passages. 5. The experimenter gives to this pathogenic microbe the name of *bacillus tussis convulsivæ*. Semtschenko, who has also studied the bacteriological etiology of pertussis, has come to the same conclusion as Afanassiew. The former observer found that the bacillus could be detected after the fourth day of the attack, and that it disappeared only with the cessation of the paroxysms. However important this discovery of the bacteriological cause of whooping-cough may be, there is but little probability that it will advance the therapeutics of the affection. Thus far, at least, bacteriological discoveries have been of but little practical utility in the treatment of diseases.

Another interesting pamphlet just out, is Surgical Mishaps, by Prof. Nussbaum, of Munich. It has often been asserted that the younger members of the profession especially could profit more by the publication of the failures in medicine and surgery, than by the publication of successes. Viewed from this point Nussbaum's paper will be a very welcome and useful novelty. Some mishaps which Nussbaum relates have a comical besides the necessarily tragical feature. He tells us, for instance, of the case of a peasant who, many years ago, was taken to the clinics of a great medical centre in order to be treated for multiple ulcers of both legs. On being examined on the operating table, the right leg was pronounced to be curable, while the left was declared to be incurable and to require amputation. The amputation had scarcely been performed when the surgeons found, to their great horror, that they had amputated the wrong leg! Their chagrin was still increased when the right leg, which by accident had been saved, healed in a short time spontaneously.

Speaking of surgical mishaps, the grave charges of Sir Morell Mackenzie against the German Professors who treated the late Emperor Frederick, naturally present them-

selves to our mind. To anyone who has seen some of the brilliant operations performed daily by Bergmann at the Royal Clinic in Berlin, it seems impossible that so experienced and skillful an operator could make such terrible blunders as are charged by Mackenzie. Many German physicians, who previously still sided with Mackenzie, have now decided against "the specialist," who, instead of defending himself scientifically, has flung absolutely incredible charges in the face of medical men of the highest authority. It is sincerely to be hoped that silence will now ensue in this unfortunate and lamentable case.

The Berlin University has again begun its great work, with over 6,000 students, nearly 5,000 of whom are "regular matriculates," *i. e.*, graduates of a classical high-school. Prof. Gerhardt, the great clinician, has just been invested with the insignia of the rectorship, the confirmation of Virchow's election to that office having been withheld by the Government. What small and contemptible policy it is to carry political strife into the sacred halls of science. Fortunately Virchow needs no offices, no orders, nor other royal favors; his name will go down to posterity as one of the greatest of medical scientists of all ages. The poet's *exegi monumentum ære perennius*, suits here admirably well. J. S.

LETTER FROM MELBOURNE.

(FROM OUR SPECIAL CORRESPONDENT.)

Clinical Instruction in Melbourne.—Hospital for Sick Children.—A Favorite Liniment.—Mistura Pertussi.—Fees for Dispensary Treatment.—Mixed Marriages.—Hygienic Treatment of Chorea.

MELBOURNE, Sept 20, 1888.

I have said that clinical teaching seemed to be below par in this city, and on investigation it proves to be in a most wretched condition; so, while we may regret our short terms of study in theory, we can be proud of our clinical work in America. This may account for the fact that, when it comes to real down-right work, the American reaches the goal, even if he was shot through college in two years. Our clinical teachers are respected the world over, and in any well-stocked physician's library here you can find the titles of many American authors.

The most popular institution in the town is the Melbourne Hospital for Sick Children. Its general appearance and internal arrangements are as good as can be expected from the conversion of a large private mansion into a hospital—a change never fully successful. The out-patient department has a separate building about fifty yards away from the main hospital. I found Dr. Cole, one of the resident physicians, in charge. This is a rich and valuable clinic, one of the best in town, yet rarely attended by a student. A nurse is employed to aid in bandaging, and in dressing wounds, just such work as our boys at home would delight in doing. This very fact shows in a strong light the condition of clinical medicine in Melbourne. Dr. Cole says that the University is trying to make it compulsory to attend this service, but so far nothing has been done. About six hundred children are treated here each week. Think of the waste of lessons which could here be learned. There is no attempt at classification, except what the Resident Physician does as the cases appear before him. He may assign them to the visiting doctors on different days. If some student could pass through the waiting-room before the clinic hour, and group the cases, much hard work would be taken from Dr. Cole. An ordinary tea-bell calls the waiting one to come in, and during my visit a stream of thirty cases poured in that door in the space of one hour—two minutes to a case: varus, hip joint disease, spinal trouble, chicken pox, scrofula in all its varieties, catarrhal affections, were included; but as nothing especially interesting presented itself, I picked up the hospital pharmacopœia. It proved to be different from the usual American hospital pharmacopœia in that it was arranged for quick prescribing, and that it did not harp on the economy strain. Well do many of us remember the days of dispensary work in Philadelphia, when, to get nearer quinine than sulphate of cinchonia, or to dream of a purge more costly than Epsom salt, was running amuck of "Boards"; and when the shadow of displeasure rested on the brow of the Resident when we were called before him to explain why we had done thus and so. In this Melbourne volume I found quinine, citrate of iron and quinine, all the oleates—in fact, no discrimination seems to be made by reason of cost. Nothing essentially new appeared in the form of the prescriptions, except perhaps the frequency with which eucalyptus oil is used in external preparations.

A favorite liniment is composed of equal parts oil of eucalyptus and olive oil. Dr. Cole speaks highly of the *Mistura Pertussi*,

which is made up of: ammonium bromide and chloral, of each one grain; belladonna juice and wine of ipecac, of each three minims; syrup of Tolu, twenty minims, and water to make a teaspoonful. The standard disease, so to speak, of both in and out departments is hip-joint disease. Thomas's splint is the favorite method of dressing. Plaster-jackets for spinal diseases; thermo-cautery for nævus; oleates for skin disease of many types—so the cases and the treatment went along, nothing especially new or striking. All I can hope to do in these lines is to satisfy the curiosity which we all have to know how things are done in other parts. The conveniences in the examining-room were most meagre. A tin basin of water stood on a common kitchen table, the only article of furniture in the room except one chair and a settee; this basin was used by the Doctor as a finger-bowl—he would dip the ends of his fingers in and then wipe them on a towel laid over his lap. In examining a case of eczema of the buttocks, the general appearance of which might indicate a specific origin, Dr. Cole assured me that, while syphilis played an important part in the diseases of children in the out-department, as it does in all lands, yet specific eczema in the hospital was one of the rarest of diseases; no explanation was given of this statement.

Now I can record a useful feature; each applicant for treatment must pay a shilling a week as long as he is under treatment in the out-ward. If absolute poverty exists, so that even this small fee can not be paid, the Committee will pass such, but only on proof that the person is unable to pay; and this must be on the basis of a recommendation of some house-holder who is acquainted with the applicant. Care is used that those who are able to pay shall not impose upon the charity of the hospital. I saw a patient turned away, and it was fully proved that the patient was quite able to go to a physician. The Committee meets once a week, and all new applicants must appear before this body, which decides as to their worthiness for charitable care. This takes the matter out of the hands of the attending physicians, and the too usual habit of abusing charitable work is done away with. The disgraceful system of making the clinic room the feeder for the private office can not be carried on to the same extent here as in America, and thus one of the complaints made against hospital work is removed. Nowhere in the world is there such a flagrant abuse of this very thing as in Philadelphia, and as it is a well-known fact to the profession here, it makes one feel a little unpleasant to have it brought up. I assure you I do all in my power to correct any wrong impressions that may be held concerning us. I tell them here that it is but natural for quacks to play upon the great reputation that Philadelphia has earned as being one of the great medical centres of the world.

After the hour had passed in the out-department of this children's hospital, Dr. Cole introduced me to his colleague, Dr. A. J. Wood, who at present has charge of the in-department. He and Dr. Cole alternate once in two months in the two departments, thus giving each a chance to have a change, besides being able to follow up any cases that may be desirable to study. This institution is aided quite substantially by the Government, and it is also a favorite object for the charity of the wealthy ladies. I noticed a number of wards bearing the name of some well-known Colonial lady, she having bought the ward, as it is called, giving what would be requisite to build and furnish the ward complete, which is generally estimated at five thousand pounds. This just permits the name of the donor being given to the ward; to secure a life-control, a further donation of at least the same amount is required. The walls of the different wards are adorned with pictures, a donation from someone; and here and there hand-painted tiles and terra-cotta pipes were noticed, the work of some young ladies of means and leisure who do this to amuse the poor little ones, and to make the wards as attractive as possible. We do not wonder at this; of all the charities, it would seem to be the one that cares for the child which would most appeal to the natural instincts of women. There are nine wards and seventy beds, sixty-two of which are at present occupied. In midsummer the place is full to overflowing, and for the same reason that I have given so often—a great prevalence of typhoid fever: often one-fourth of the cases are of this disease. Dr. Wood tells me that there seems to be a four-year cycle of typhoid fever; for every four years the demands for entrance of this class of disease are completely beyond the accommodation of the hospital. Among the cases there are a number of half-caste—white and Chinese. This mixture I am told is very frequent here, and on consulting Mr. Hayter, the Government statistician, I find that quite a number of Chinese have married white women in the Colonies. There are also

some illegitimate children of this kind. Hayter says that in the last twenty years three hundred and fifty marriages of this kind have taken place in the colony of Victoria alone; of these women one hundred and sixty were Victoria-born; fifty-three were born in some other Australian colony; English, Welsh, and Scotch women numbered seventy-one; Irish, twenty-five; United States and Germany must own each two; the rest are from various parts of the globe. Some quite nice-looking and young white girls have been found living as concubines with Chinamen in Melbourne; on reproaching them they answer: "White chaps black our eyes, get drunk, and treat us mean; Chinamen treat us very well, give us plenty to eat and wear, and we are satisfied."

Passing through the wards, nothing presented itself as especially of interest: there are any number of "hip" cases. It is a strange fact that a case of rickets has never been seen in the hospital, and it is said to be very rare in the Colonies. In one bed was a patient admitted the day before with convulsions, who now is found to have an apex pneumonia—a common start for this kind of pneumonia. There were a number of cases of chorea, and some of most violent type; the treatment is the usual one—arsenic, in some cases strychnia, in the majority, rest in bed, good food, massage, etc. The Doctor let slip the opinion that he had lost much of his earlier faith in medicines, and in this line of cases especially; cases put on the hygienic plan in the total he had found to do fully as well as those treated with medicines. To prove this, we went over the histories of a number of the cases; one of the worst cases that has been in the hospital for a long time recovered under massage and rest. The average length of time to effect cure by either method was six weeks. Of late a convalescent ward has been opened at Brighton, one of the sea-shore suburbs of Melbourne; it is a cottage fitted to answer the purposes. The rooms of the Hospital are large and very sunny, and a fine outlook is obtained on the beautiful Carlton Gardens just opposite. A point worthy of note is the fine-looking, healthy and very intelligent corps of nurses; the children seem to be in love with their attendants, which was a most pleasing sight, and aids to soften somewhat the feeling of great pity which possesses one on seeing these poor little ones afflicted with most dire complaints.

PERISCOPE.

Antipyrine Rashes.

At the meeting of the South-East Hants District Medical Society, October 11, 1888, Dr. C. C. Claremont read a paper on antipyrine rashes, in which he described two cases which had occurred in his practice during the course of enteric fever. In the first, ten doses of fifteen grains had been given in the course of ten days, when the eruption appeared. It came out simultaneously on the abdomen, thorax, back, and limbs in the form of papules, darker, larger, and more solid than the spots of enteric fever. There was a considerable resemblance to measles. The eruption developed into enormous erythematous blotches, with much infiltration, their vivid red color being removed by pressure, leaving faint yellow pigmentary discoloration. The rash began to subside on the sixth day, and on the tenth day was only represented by faint coppery maculæ, resembling an old syphilitic eruption. Antipyrine was omitted on the appearance of the eruption. In the second case, the drug had been given in fifteen-grain doses, generally twice a day, and omitted altogether for four days. The enteric exanthem had been unusually copious. On the twentieth day of the exhibition of the drug there was a papular erythematous rash on the extensor surfaces of the arms; this spread to the flexor surfaces, and also affected the calves. The antipyrine was omitted. On the fourth day the rash had almost gone, leaving only slight redness and desquamation. The patient had a relapse of fever, and was again treated with antipyrine without suffering from a return of the eruption. Dr. Claremont stated that antipyrine rash generally was of the papulo-erythematous type, and began on the extensor surfaces of the elbows and knees. It had been described in one case as commencing on the face, and in another as extending to the mucous membranes. Once vesicles had been present. Its most constant characters are its bilateral symmetry and its duration of about five days, irrespective of the continuance or withdrawal of the drug. The entire absence of subjective symptoms was exceptional. A scarlatiniform rash had been mentioned, but Dr. Claremont had been unable to ascertain that it was more than a transient flushing, such as is produced by belladonna.—*British Med. Journal*, Oct. 27, 1888.

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NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

THE HEALTH OF PHILADELPHIA.

The study of the reports of Boards of Health is not always the easiest or most entertaining exercise of an inquiring mind; but if it were carried out systematically, it would supply instruction of no mean value. The statistics gathered in Philadelphia furnish an illustration of this fact, for they have more than once served to correct misapprehensions founded upon an illogical application of assumptions which are theoretically sound, but which are sometimes used with more zeal than discretion.

Not long since a strong effort was made, with motives partly humane and partly mercenary, to show that the water-supply of Philadelphia was prejudicial to the health of its inhabitants; and from time to time alarmists arise who with well or ill-meaning ardor exploit the danger of local conditions. To such persons the study of statistics must be peculiarly distasteful, for they usually appear to have neglected it altogether.

These remarks are suggested by an examination of the report of the Health Officer of Philadelphia for the week ending Saturday, October 27, in which some curious and interesting points may be noted. The first is that the deaths from the principal zymotic diseases number only twenty-seven, and that these include only eleven deaths from typhoid fever, eight from scarlet fever, one from diphtheria, and two from what are classed as "malarial fevers." It is singular to note also among them four deaths from "cholera infantum."

Another noteworthy feature of this report concerns the distribution of the deaths in reference to age. About one-third (121) occurred before the age of five years, about one-third (110) between the ages of five and fifty years, and about one-third between the ages of fifty and one hundred years. Nearly one-fourth (77) of the persons who died had lived over sixty years—precisely as many as those who died in the first year of life, and almost twice as many as those who died of consumption of the lungs.

These facts—which are not peculiar to the period under consideration—are both interesting and instructive, and they indicate that the prospect for long life and health is remarkably good in Philadelphia. The actual death-rate shows little compared to an analysis of the causes of death and the ages at which it occurs. In a city with a population estimated at over a million, a death-rate of 17.42 per thousand per annum places it at the very head of large cities in the whole world; and when these deaths

are found to be distributed so evenly between the extremes of infancy and old age it is utterly unreasonable to believe that there are here any conditions peculiarly prejudicial to life or health.

It would be interesting, we believe, to apply this method of study to the statistics of other large cities, and to investigate closely the causes of death and the ages at which it occurs, with a view to ascertaining the actual influence of conditions which are commonly believed to affect the health of their inhabitants. Such a method could not fail of furnishing more exact information than the more general consideration of death-rates which is so often adopted by those who discuss the important problems of public health.

THE CARE OF THE INSANE.

At a recent meeting of the Committee on Lunacy of the State Board of Charities of Pennsylvania, resolutions were passed urging a more general adoption of certain measures which have already proved useful in a number of the institutions for the care of the insane in this State. One of these measures is the appointment of women physicians to have charge of the female patients, which has proved so successful in the Philadelphia Hospital, and at Harrisburg and Norristown. The State Hospitals at Dixmont, Danville and Warren have not yet taken such a step; but it is hoped that they will do so before long.

The Committee also urges the Legislature to appropriate funds sufficient to provide for the erection of buildings to receive the chronic insane, imbeciles and dements in the State, so that there shall be no need for keeping any of these unfortunates in almshouses.

In regard to idiots and feeble-minded persons, the Committee recommends the erection of a suitable retreat, to supplement the work now done by the excellent private Training School at Elwyn, or that this school shall be enlarged at the cost of the State.

One of the most important recommendations of the Committee refers to the treatment of the criminal insane. Notwithstanding the fact that as long ago as 1875 the Legislature of Pennsylvania was asked to provide for the erection of a building in which the criminal insane might be confined and treated, this has never been done, and a large number of such persons are still confined in prisons or almshouses. Such a practice is neither humane nor judicious, and the Committee advises the erection of a building easily accessible from all parts of the State, to which may be committed all insane persons who have committed serious crimes, as well as persons charged with, or convicted of, such crimes who are believed to be feigning insanity, or whose condition requires the investigation of experts to determine the condition of their minds. These provisions cover all cases in which insanity develops or is feigned after the commission of serious crimes, during the period of a sentence to imprisonment; and they apply as long as the real or feigned insanity continues, even after the termination of any judicial sentence, unless the friends of the prisoner are able to care for him or her satisfactorily.

The last resolution of the Committee urges the Managers and Trustees of the State Hospitals for the Insane at Harrisburg, Dixmont, Danville and Warren to consider the propriety of restricting the duties of the Medical Superintendents to the professional care and treatment of the inmates, and taking from them the administrative functions which they have hitherto exercised.

All of these recommendations except the last meet with our hearty approval, and we think they need only to be stated, to secure the approbation of all who have given much thought to the management of the insane. As to the last, the case is not quite so clear. There is much to be said in favor of the opinion expressed by the Committee; and yet there is also much to be said in favor of keeping the administration of an institution

for the insane in the hands of a competent medical superintendent. Those who favor the former view usually cite the example of the Hospital at Norristown, to show what may be accomplished where the medical officers exercise only professional functions; while those who favor the latter view point to the good work done in all the other large institutions in Pennsylvania which are practically governed by the medical officers, and to the unfortunate developments at Morris Plains, New Jersey, where the other plan has been pursued.

For the present it is by no means clear that the medical officers of institutions for the insane are not the best persons to manage them altogether, or that the admirable results of the dual form of government which exists at Norristown would be sure to follow its substitution for that which is found at the other State Hospitals in Pennsylvania.

Whatever may be the opinion of our readers on this particular question, we trust they will give careful consideration to the recommendations we have cited, and endeavor to impress right views in regard to them upon their representatives in the Legislatures of the States in which they reside. The interests involved are not local, but are of as pressing importance to our readers in Maine, or California, or Texas as to those in any part of the world.

In regard to the last of the Committee's recommendations we would be glad to have some expression of opinion from any of our readers who have had experience in the treatment of the insane, to aid us and all of our readers in arriving at a wise conclusion as to its value.

EARLY SIGNS OF PREGNANCY.

There are probably very few physicians who have not at times felt the need for some trustworthy means of deciding upon the existence or absence of pregnancy at a time when if present it could not be far advanced, and when it is too soon to expect to hear the sounds of the fetal heart or to obtain the confirmation of *ballottement*. In this country Hegar's sign of pregnancy, which has been well described by Dr. A. K. Bond, in an article in the *Maryland Medical Journal*, in the early part of this year, has not received the attention it deserves, and American physicians have failed to appreciate, or at least to practice, Hegar's method.

This sign is to be determined by combined rectal and abdominal examination. It consists in the detection of an unusual softness, thinning, and yielding condition of the lower uterine segment—that is, of the part immediately above the insertion of the sacro-uterine ligaments. This condition of the part is perceptible whether the rest of the body of the uterus feels firm and hard, or soft and elastic. Even in the latter case it is always possible to compress the lower uterine segment, to draw it out to a certain degree with the fingers, and so to distinguish it from the part above it; while below, the cylindrical cervix of firmer consistence is felt distinctly coming off from it. The yielding and flaccid condition of the part may be so great that one may doubt whether there is any connection at all between the neck and the larger swelling in the abdomen or pelvis. This is especially true when pregnancy occurs in uteri with hypertrophic elongation of the cervix; and even laparotomy has been done under the mistaken idea that the pregnant corpus was a tumor, independent of the uterus. The condition referred to depends upon the fact that the lower uterine segment, as the thinnest part of the corpus, on account of pregnancy, becomes succulent, of looser texture, thinned and extremely elastic. According to Reine, "failure to find this, however, in no way excludes pregnancy, since it is easy to see that with marked chronic infarctio uteri (hyperplasia), pregnancy may exist without rendering this condition of the lower uterine segment very evident."

There is another useful sign of pregnancy which depends upon the well-known fact

that, in the first eight weeks of pregnancy, the principal enlargement of the uterus is in the antero-posterior diameter of its corpus, while the cervix undergoes scarcely any change, except a superficial softening at the external os. The direction of the enlargement of the body of the uterus causes it to project markedly from the cervix, especially in front. The shape of the whole uterus has been likened by Grandin to an old-fashioned fat-bellied jug. This striking relation between the corpus and cervix is readily distinguished by one moderately skillful in making the bimanual examination. A quite characteristic bogginess, softening, and compressibility of the lower uterine segment is also detected. This sensation is brought about by the effects of the physiological congestion of pregnancy upon the uterine tissues, and partly, also, by the fluid contents of the uterus.

The condition just described is an almost positive sign of pregnancy, especially if in addition there is marked fulness and pulsation of the vessels on both sides of the pelvis, without evidence of pelvic inflammation, and a more or less distinct purple hue of the vagina. It is reliable as early as the sixth or eighth week.

It would seem, theoretically, that this method of examination had one marked advantage over combined rectal and abdominal examination, for not only can the physical condition of the lower uterine segment increased mobility of the corpus be made and out nearly as well, but the striking jutting out of the corpus over the cervix is much greater in front than behind and therefore more easily detected through the vagina than through the rectum. Naturally the employment of both methods of examination would give more trustworthy information than either alone. This condition of the lower uterine segment was apparently known to Dr. Rosch as long ago as 1873, but he failed to appreciate fully the subject and only laid stress on the feeling of fluctuation to be obtained by bimanual examination.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

PHYSICIANS' INTERPRETER. IN FOUR LANGUAGES. SPECIALLY ARRANGED FOR DIAGNOSIS. By M. von V. 206 pages 5 x 2½ inches. Philadelphia: F. A. Davis, 1888. Price, $1.00.

This little pocket-book contains a large number of questions and answers in English, French, German and Italian, especially arranged in parallel columns and adapted to the needs of medical men in conferring with their patients. The work is well done and calculated to be of great service to those who wish to acquire familiarity with the phrases used in questioning patients. More than this, we believe it would be a great help in acquiring a vocabulary to be used in reading medical books, and that it would furnish an excellent basis for beginning a study of any one of the languages which it includes. For the convenience of those who use it, it contains a large number of blank leaves to receive written notes.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

149. An Examination of the Eyes of Fifty Cases of Chorea in Childhood. By G. E. De Schweinitz, M.D., Philadelphia. From the *New York Medical Journal*, June 23, 1888. 13 pages.

150. The Differentiation of Serous Iritis from Subacute Primary Glaucoma, with a Brief Outline of Treatment. By N. C. Steele, M.D., Chattanooga, Tenn. 6 pages.

151. Report of Progress in Medicine and Surgery. By John S. Hughson, M.D., Sumter, S. C. From the *Transactions of the South Carolina Medical Association*, 1888. 11 pages.

152. Report on the Progress of Genito-Urinary Surgery. Some Points in the Management of Urethral Stricture. The Specific Microbes of Gonorrhœa. By E. R. Palmer, M.D., Louisville, Ky. From the *Amer. Practitioner and News.* 37 pages.

153. Exophthalmic Goitre. By Augustus A. Eshner, M.D., Philadelphia. Prize Essay, Jefferson Medical College, 1888. 8 pages.

154. The Gradual Preparatory Treatment of the Complications of Urinary and Fecal Fistulæ in Women, etc. By Nathan Bozeman, M.D., New York. From the *Transactions of the Ninth International Med. Congress.* Vol. II. 44 pages.

155. Operative Interference in Early Extra-Uterine Pregnancy. By Michael O'Hara, M.D., Philadelphia From the *Transactions of the Ninth International Med. Congress.* Vol. II. 4 pages (not numbered).

149. Dr. De Schweinitz presents an exceedingly good report of a very thorough examination of the eyes of fifty children who had chorea, and appends to it the conclusions to which his study has led him. The one of these which will probably make the most impression upon general practitioners is that the relation of chorea to errors of refraction is not yet clearly determined. This does not, of course, militate against doing all that may be possible to correct such errors.

There is a good deal more in this pamphlet than what we have already said describes, and it is calculated to be very useful to all who wish to be well-informed on this interesting subject.

150. The motive of Dr. Steele's pamphlet may be found in his statement that "great numbers of eyes have become stone-blind forever, because the attending doctor mistook glaucoma for some other disease, such as neuralgia, iritis, erysipelas or cataract." From this he proceeds to describe, by text and tables of symptoms, how such an error of diagnosis may be avoided. The section on treatment is very brief, but sufficient to indicate what is best to be done in both the conditions under discussion.

151. Dr. Hughson's paper discusses a few points of medicine and surgery in which notable advances have been made during the last five years. Antipyrin, antifebrin, sparteine and strophanthus are the drugs discussed, and operations for stone and diseases of the appendix vermiformis are the surgical subjects treated of.

152. The points covered in Dr. Palmer's little pamphlet are too numerous to be mentioned; but he gives in a small space a great deal of interesting and instructive matter. It will be unusually interesting to those who do not care to go through elaborate treatises on these subjects, and would be very entertaining reading for odd moments in the busy doctor's day.

153. Dr. Eshner presents a summary of the present knowledge in regard to this curious disorder, citing the views of many of the best known writers on the subject. Like all other writers, he devotes more space to the study of its pathology than to that of its treatment. As to the latter, he finds that the best results seem to have been obtained by the application of electricity to the neck.

155. Dr. Bozeman's paper is a long and elaborate one, covering the subject indicated in that part of its title quoted above, and also those for which there is less room in our columns than on his title page, namely, the treatment of pyelitis by a new method, and the prevention of the evils of incontinency of urine by a new system of drainage. The paper is very full and contains a large number of well executed illustrations. It is hardly necessary to recommend it to the notice of the readers of the REPORTER in view of the reputation of its author.

155. The title of Dr. O'Hara's paper is not correctly worded. It ought to be: "Early operative interference in extra-uterine pregnancy." It contains a rather rambling report of two cases which had come under his observation, in one of which laparotomy was successfully performed by Dr. W. H. Parish.

—St. Joseph's Hospital in Montreal was damaged November 15, to the extent of about $30,000.

CORRESPONDENCE.

Cure of a Malingerer.

TO THE EDITOR.

Sir: An article in the REPORTER of the 3d instant, entitled "A Cunning Malingerer," reminds me of a remarkable cure I made in a somewhat similar case. It occurred in 1863. A private in the regiment of which I was surgeon suddenly became very deaf. I was certain he was malingering, but I could never catch him. He was always on his guard. He informed me that his father and two brothers became deaf on reaching his age, and continued so, in spite of every effort. I invited the surgeon of another regiment to be present at my "sick call," and informed him in the presence of the deaf soldier, and in a very low tone of voice, that I should perform the French operation the next morning upon my patient. The surgeon asked: "Which operation?" I informed him I should take a rod of iron the size of a crow's quill, and, heating it to a white heat, bore it through from ear to ear; that if it did not kill him, it might help him. The next morning when he appeared at sick call, before I could speak to him, he said: "You will not have to perform any operation, for something *busted* in my head last night and I can hear as well as I ever could." The cure was complete.

Yours truly,

WM. A. SMITH, M.D.,

Late Surg. 47th Reg. N. Y. S. Vol.

Newark, N. J.,

Nov. 6, 1888.

Prickly Ash and Abortion.

TO THE EDITOR.

Sir: Enclosed please find check for $5.00 to pay for one year's subscription to the MEDICAL AND SURGICAL REPORTER. I have not been a subscriber very long, but am better pleased with the REPORTER than any journal I have taken or read, and would not like to be without it. I wish to inquire of you, or, through the columns of your journal, of the medical profession, if anyone has ever known of miscarriage or abortion being produced by fluid extract of xanthoxylum (Prickly Ash)? I can find no mention of any such action in U. S. Dispensatory. I have used the drug a great many times in chronic muscular rheumatism, with excellent results; but in a recent case abortion followed its use and I would like to find out if the drug had anything to do with the acci-

dent, so as to be on my guard in the future. Hoping you will excuse me for troubling you with this inquiry, I remain

Yours truly,

X. Y. Z.

Hollis, N. H.,
Nov. 5, 1888.

[There is no reason to believe that the Prickly Ash can produce abortion except it were given in doses large enough to cause very great gastro-intestinal irritation, and then only in consequence of this action.—Ed. REPORTER.]

NOTES AND COMMENTS.

Association of Acting Assistant Surgeons of the U. S. Army.

Those familiar with the Army Medical History of the frontier for the past twenty or thirty years will readily bear witness to the faithful and intelligent discharge of their duties, by the Acting Assistant Surgeons of the U S. A. In fort and in camp, on the long overland expedition, or in the Indian wars, these men have done their duty as faithfully and with the same professional efficacy as if they had been regularly commissioned officers. Indeed, if they have not borne the burden and heat of the day, certainly their honorable records deserve recognition and preservation.

An association of past and present Acting Assistant Surgeons of the United States Army has been formed for the purpose of securing, so far as possible, a correct history of those who have served in this capacity, and also for mutual protection and benefit.

The Association desires to obtain a complete list of all medical men who have served as Acting Assistant Surgeons in the United States Army, and, so far as possible, their complete medical history, date and place of birth, date and place of graduation, date of appointment, medical service and stations, list of contributions to medical literature, inventions, etc., date of termination of service, professional positions held in civil life, present residence and address.

All information from friends concerning deceased A. A. Surgeons will be gratefully received. All past and present Acting Assistant Surgeons are cordially invited to become members of the Association. The badge of the Association is the Geneva Red Cross. The enrollment fee is $1.00. The necessary blanks will be forwarded upon application to W. Thornton Parker, M.D., Recorder A. A. A. S., Newport, R. I.

Disease in Adults and in Children.

Dr. W. H. Dickinson, in his introductory lecture on the differences between children and adults in regard to morbid action and the effects of treatment (*Lancet*, Nov. 3, 1888), says that such of their diseases as are of the nature of growths partake of the rate of progress which belongs to the period of development. This applies to the fibroses as well as to isolated tumors, though the fibroses are far more infrequent than afterward. Many inflammatory disorders, especially of the brain, are more common in childhood than later; but with regard to many inflammations, the power of recovery is greater. Inflammations of the lungs are more frequent and cause more deaths, but in the individual the prospect is better. Acute rheumatism is comparatively infrequent, but when it occurs it brings greater danger to the heart. Some febrile complaints are more frequent, and some less so, than afterward; but as a rule their proportionate mortality is less. There are special differences in the action of drugs, the most important of which is the greater influence of alcohol for good and evil. Finally, children respond to treatment — as they often succumb to disease — more readily than do older patients; so that with them our responsibility is greater.

Ice-Cream Poisoning.

The following particulars of a case of ice-cream poisoning which recently occurred at Mountain View, Santa Clara County, Cal., by which a number of persons were seriously affected, have been furnished by Dr. C. V. Jones of that town. The ice-cream freezer was a new one, being used for the first time, and had been constructed by the local tinsmith. It was made of tin, soldered on the inside to avoid cracks or crevices. The maker states that he has made over 100 in this manner and has so far had no complaint. A solution of zinc in muriatic acid is used in the soldering process, but this is readily removed by a thorough washing, which the person who made the ice-cream states that she gave the apparatus. The party, to the number of twenty, including the woman who made the ice-cream, were seized, soon after eating, with vomiting and purging, accompanied by severe griping pains. The vomited matter was noticed to be intensely acid. Under appropriate treatment the symptoms subsided, all the victims recovering within twenty-four hours.—*Sacramento Med. Times*, Nov., 1888.

Rectal Injections of Saline Fluids in place of Transfusion.

Mr. Rainsford F. Gill, in a clinical note to the *Lancet*, Nov. 3, 1888, says that he feels sure that the following method of treatment in severe cases of post-partum hemorrhage may be instrumental in saving life. It consists in the substitution of rectal injections of saline solution in place of transfusion, or rather, in those cases in which the performance of transfusion is impossible from want of the necessary apparatus. He is convinced that it proved efficacious in a case to which he was called a short time ago, and in which, on arrival, he found that the patient had lost an enormous quantity of blood and was delirious, with vomiting, etc., so that nothing could be retained. Before he succeeded in stopping the hemorrhage she was in a very collapsed condition, and on pouring a teaspoonful of fluid down her throat it was immediately rejected. He then used rectal injections, which were rapidly absorbed, so that within two hours she was again conscious and able to retain fluids given by the mouth. He thinks that if he had not used the injections in this case he would have lost the patient; and that it is precisely in such cases, in which the practitioner is without a transfusion apparatus, that the rectal injections are so useful, as he will always be provided with the syringe. Only two or three ounces of fluid should be injected at a time, and the injection repeated every ten or fifteen minutes, using a tepid solution; of course all auxiliary methods of relieving the existing shock to the system should also be employed.

The Southern Surgical and Gynecological Association.

The annual meeting of the Southern Surgical and Gynecological Association for this year will be held December 4, 5 and 6, at Birmingham, Alabama. The programme contains the titles of a large number of papers on important subjects in general and gynecological surgery, by men very well known in the profession.

Excursion rates to and from the meeting-place have been secured by the Committee of Arrangements, and those who desire to take advantage of them must obtain a certificate from the railroad agent on purchasing a ticket for Birmingham.

Further information may be obtained on application to Dr. J. D. S. Davis, Chairman Committee of Arrangements, Birmingham, Alabama.

NEWS.

—The University of Berlin is to have an additional Anatomical Institute.

—A Dental School is to be established in connection with the University of Vienna.

—All prescriptions in Alsace-Loraine must now be written in either German or Latin. The use of French for this purpose has been prohibited.

—Dr. Henry Miller, who made $3,000,000 in the manufacture of pills, was buried at Wilmington, Mass., recently. Large sums of money were spent upon the funeral.

—Dr. Edwin B. Shaw (*Kansas City Med. Index*, Oct., 1888) suggests the employment of rectal injection of hydrogen gas as a method of treatment of intussusception.

—The *Ledger* is responsible for the story that a Kalamazoo girl was engaged in a public gum-chewing contest at Minneapolis, and after an exhibition of rapid chewing her jaws "set." She rushed off to a physician, who discovered that some of the muscles of her jaw were paralyzed. In a short time the trouble passed away.

—During the year 1887, says the *Medical Press and Circular*, Nov. 7, 1888, there were 7,570 suicides in France. 2,168 were caused by cerebral affections; 1,528 by physical suffering; 202 were committed to avoid legal troubles; 800 were caused by alcoholism; 483 by poverty; 227 by disappointments in love, etc.

—Joseph Stewart, a colored man who practises medicine in this city, was ordered to stop posing as a doctor by Coroner Ashbridge, at an inquest held Nov. 16, on the death of a young white man, of consumption, at Stewart's house, where he had been about a month. Stewart is not a graduate of any college, and the Coroner ordered him to take his sign down and call in all his cards, otherwise he would report the facts to the District Attorney.

—Typhoid fever is said to be prevalent in many homes in the neighborhood of Montrose, the northern section of the village of South Orange, N. J., and several deaths have occurred. It is feared that others will succumb to the fever, which is spoken of as malignant. The circumstances connected with its appearance are of such a nature as to suggest that the disease is propagated by impure milk, which, being widely consumed, has led to the dissemination of the fever.

—A report has been made to the Central Board of Health of Melbourne, says the *British Med. Journal*, Nov. 3, 1888, describing an outbreak of diphtheria, the cases occurring almost simultaneously in the neighborhood of Daylesford. One child died, but the others are progressing favorably. The local health-officer has furnished a report pointing out the strong *primâ-facie* evidence that the children contracted the disease from cats, numbers of which are said to be dying in the neighborhood.

—The *News* and the *Journal* of Chicago still continue their war against cigarettes. The *News* has had a number of cigarettes of popular brands analyzed. They were stripped of every distinguishing mark, each brand put in a separate box, the lid of which was inscribed with a letter, and the whole lot then handed over to a well-known chemist. He found that the cigarettes submitted were generally made of tobacco "imperfectly fermented," and that nearly all had an unnatural proportion of insoluble ash; that several kinds were steeped in an injurious substance, and were impregnated with dirt in varying proportions.

HUMOR.

To be Developed Later.—"So your old uncle is dead, Charley?" "Yes, died yesterday." "He was a very eccentric old fellow. Do you think he was altogether right in his head?" "Well—er—I couldn't say, you know, until the will is read."

The Coachman's Diagnosis.—Gentleman, to the doctor's driver: "Tell me, how is the Councillor getting along?" Driver: "Oh, we've got him well; but the General is doing badly; we're having a great deal of trouble with him."—*Fliegende Blätter.*

Something Peculiar.—A. "My cousin is a queer fellow. I never know what he will do next; but it is always something peculiar." B. "For example?" A. "Well, just think, in the summer of 1888, the fellow got himself sun-struck!"—*Fliegende Blätter.*

A Remarkable Remedy.—"Doctor, I can't take this medicine; it tastes horrible!" "Oh, never mind, I have the most extraordinary results from this drug. I prescribe it for all my patients. None of them take it; and they all get well!"—*Fliegende Blätter.*

Loyal to the Last.—Husband (returning from the mountains)—"Are you chilly, my dear?" Wife—"I'm nearly frozen, John. Who was that gentleman in the straw hat and linen duster who just drove by?" Husband—"The landlord of the hotel below here."

Forgot About It.—Brown—"Have you seen Robinson recently, Dumley? I hear he has been sick." Dumley—"Yes, I saw him this morning." Brown—"How is he?" Dumley—"By thunder, I forgot to ask him. I just said 'How are you, old man?' and passed on."—*Time.*

For Value Received.—A correspondent writes to the *Cincinnati Lancet-Clinic*, October 6, 1888, that he on one occasion went to a meeting in which the pastor called on the old family physician of the neighborhood to offer prayer. The latter arose, and after an invocation of several minutes' duration ended his petition with this remarkable appeal: "And now, oh Lord, please be adoin' better by us in the future than you've been adoin' in the past, and then to you will be the power, glory, and everlastin' singin'. Amen."

OBITUARY.

HENRY B. SANDS, M.D.

Dr. Henry B. Sands, the eminent New York surgeon, died of heart-failure in a carriage on Fifth Avenue, Nov. 18, 1888. Dr. Sands was born September 27, 1830, in New York City, and made his home in that city and Brooklyn. On entering the College of Physicians and Surgeons of New York, he became known as a faithful and energetic student. He was graduated from the College in 1854, and immediately was offered a position in Bellevue Hospital. He subsequently went abroad to continue his studies. On his return, in 1857, he was made Demonstrator of Anatomy in the College of Physicians and Surgeons. During the past twenty-five years, he has been connected with many hospitals in New York City. His last position was Visiting Surgeon at Roosevelt Hospital, from which he resigned only last spring. Dr. Sands was frequently called in consultation in critical cases. When General Grant was suffering from cancer, Dr. Sands was called to consult regarding the advisability of an operation to remove a portion of the cancerous growth. With Dr. Barker he also had charge of Roscoe Conkling, and performed the surgical operation necessary. He is said to have been most successful in the operation of laparotomy.

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COMMUNICATIONS.

TREATMENT OF INSOMNIA BY HYPNOTISM.

BY ARTHUR C. HUGENSCHMIDT, M.D.
(UNIV. PA.), PARIS, FRANCE.

The remarkably refractory character of certain insomnias to the action of the numerous drugs that are recommended for them is well known. The three following cases, the only ones in which I have tried mental suggestion, have proved to me that hypnotism can be of great value in insomnia.

Case I.—A woman, 49 years old, who had been under medical treatment for several years, for well-advanced Bright's disease, complained especially of pain in different parts of her body. She had headache, pain in the chest, in the lumbar region, and down both thighs; she had been unable to sleep quietly for the past fifteen months. She was obliged to sit up in bed, while resting, on account of very severe coughing spells during the night, which often brought on vomiting. She suffered with renal asthma, the spells often coming on every ten minutes or quarter of an hour. She applied to me in May last, for relief especially against the insomnia, which had resisted all the drugs usually employed for this affection. I proposed to her to try hypnotism, and she readily assented.

I hypnotized her in less than five minutes at the first sitting, by making her fix her eyes upon the end of my index finger. As soon as she was asleep, I suggested to her the disappearance of all her pains, naming the different locations one after the other. I also said that she would have no more coughing spells during the night, and that she would sleep perfectly well and continuously during the whole night. I repeated this last phrase three or four times, to make a strong impression on her mind. The next day, she declared that she had had a continuous sleep during the night, had been able for the first time to lie flat on her back, and had had no coughing spell at all. She has felt much better ever since, and now sleeps very well; the pains also have disappeared. I learned subsequently that she now had occasionally coughing spells on awaking in the morning. At her next visit I shall again hypnotize her for this trouble, and for the pains in other locations which have appeared.

Case II.—A young woman, 26 years old, who had been nursing for over two months a younger sister suffering with scarlet fever and complications. As a result she had lost her sleep, which failed to be restored by all the hypnotic remedies used. I proposed to her parents the use of hypnotism, to which they assented. I made her fix her eyes upon my index finger, but I did not succeed in placing her in the proper position. The next day I tried again, with success this time. I suggested to her to sleep continuously that same night, and to awake only at the time at which she usually rose. That same night she had one continuous sleep, and has slept perfectly well ever since. At the time of this report, nine months have elapsed since she was hypnotized.

Case III.—A woman, 40 years old, who had lost her power to sleep, from nervous exhaustion and mental worry. She was less easily affected than the two patients just mentioned. I never could get a favorable

state for making my suggestion. Still, I obtained for her the first night four hours of continuous sleep; and having renewed the treatment several days in succession, I obtained six hours' sleep every night. I have not heard of this patient since she left Paris, the day following my last visit, and hence cannot say whether the result has been maintained or not.

Hypnotism certainly deserves to be faithfully tried, for I am confident that much good can be derived from its careful use in medicine. Whenever one or several drugs fail to produce the desired effect in a certain disease, give hypnotism a fair trial, and you will probably be repaid for your efforts. As to danger from its use, I have studied this method carefully for several years and employed it in many cases, without meeting with one single annoyance. I have used it, daily in one case, for over six months, without any apparent trouble. Professor Bernheim, of Nancy, has recorded one case in which he had hypnotized a patient daily for over two years, without noticing the slightest change in the intellectual state of his patient.

NASAL POLYPI.

BY BALDWIN GLEASON, M.D.,
PHILADELPHIA.

In the MEDICAL AND SURGICAL REPORTER, September 8, 1888, appeared a scholarly article by Dr. G. Archie Stockwell, upon "Nasal Polypi." Some of the statements in this article are so contrary to the experience of specialists in this city, that it seems hardly best to let the matter rest without a word of friendly criticism. The treatment, also, which he advised the general practitioner to use for the removal of these neoplasms, is so capable of doing great harm, unless used with extreme caution, that a word of warning will certainly not be out of place.

Dr. Stockwell states: "Papillomata, enchondromata, osteomata, and other tumors, are exceedingly rare, and consequently do not need to be considered in this connection." If by enchondromata and osteomata are meant cartilaginous and bony spurs and ridges, projecting from the septum into the breathing space of the nostril (the ecchondroses and exostoses of Seiler), then my experience has been just the reverse of his. It is probable that some such growths are present in the noses of at least one-third of those patients who apply to our dispensaries for the treatment of nasal catarrh. A certain number of such cases absolutely require the removal of the ecchondrosis or exostosis to bring about a cure of the catarrh or middle ear disease produced by their presence. During the past year, at least twenty such operations have been done, to every one for nasal polypi, in the Nose and Throat Dispensary of the University of Pennsylvania, and in the Nose and Throat Department of the Union Dispensary.

Among the causes of nasal polypi, given in Dr. Stockwell's paper, the theory of Dr. Woakes, of London, England, is conspicuous by its absence; and yet Dr. Woakes's theory will account for the presence of nasal polypi in three out of every four cases. This theory is briefly as follows: The two upper turbinated bones, with the nasal part of the ethmoid, are covered with "*muco-periosteum*," which dips into its spongy structure. When chronic inflammation of the muco-periosteum of the ethmoid extends to the periosteal strata of the membrane, a local "*necrosing ethmoiditis*" is set up. It is to the presence and irritation of necrosed spicules of bone, Dr. Woakes asserts, that the enormous proliferation of the soft tissues about the ethmoid, which we call polypi, are due.

In most cases after the removal of polypi, it is certainly possible to detect with a probe roughened and exposed bone. In some instances the disease will be found involving not only the middle turbinated body, but the cells of the ethmoid behind it as well. That necrosing ethmoiditis frequently exists without producing polypi, and plays its part as a cause of "catarrh" and various reflex symptoms, admits of proof; for there is frequently seen in our dispensaries the crater-shaped cleft of the middle turbinated body produced by the exfoliation of necrosed bone. In his work on Nasal Polypi, Dr. Woakes gives several drawings of such clefts in middle turbinated bones.

Dr. Stockwell states: "The connection between nasal polypi and asthma is oftentimes very intimate, as has been ably demonstrated by Voltolini and Joal; indeed, the latter is not unfrequently wholly dependent upon the former." The truth seems to be that any pressure upon the septal nerve is liable to produce asthma. Especially is this the case when both middle turbinated bones are enlarged so as to nip the septum between them. When the asthma is the result of a polypus, it usually occurs before anything more than polypoid degeneration of the mucous membrane covering the middle turbinated bone can

be discerned by the most careful examination. As the polypus grows, it finally escapes from between the middle turbinated bone and the septum. Its weight stretches the mucous membrane of the middle turbinated body, so that the pressure is partly or entirely removed from the septal nerve, and the asthma is not as troublesome. The removal of the polypus, under such circumstances, does not cure the asthma, but may, at least temporarily, make it worse.

The following case illustrates these points. Isaac B., 71 years old, came to the Nose and Throat Dispensary of the University Hospital complaining that he could not breathe through his left nostril. He had had asthma for fifteen years, but had been better for some years past. Examination showed a large, somewhat fibrous polypus, which had enlarged, but completely occluded, the left nostril. It was easily removed by the snare, and the wound healed rapidly under the use of antiseptic washes and applications. The mucous membrane of both middle turbinated bones was hypertrophied and pressed upon the septum, from which, however, it could be readily separated with a probe. The asthma, instead of being cured by the removal of the polypus, was so much worse that the patient could not sleep at night. Some hypertrophied mucous membrane was therefore removed with Farnham's alligator forceps, and the electro-cautery applied to the middle turbinated bone of the left side. Three days afterward, the patient reported that he had had no asthma since the last operation. Slight attacks of asthma afterward did occur, however, and the electro-cautery was then applied to the hypertrophied mucous membrane of the right side. Since the latter was done, some six months ago, there has been no asthma whatsoever; and the reflex chronic laryngitis, from which the old man suffered, has also disappeared, almost without treatment. It was not the removal of the polypus, therefore, which brought about this good result. Had no subsequent treatment been instituted, although the polypus might not have returned —for no necrosed bone was discovered, and the mucous membrane of the left middle turbinated body, while hypertrophied, was apparently healthy—yet the asthma would have remained uncured.

Dr. Stockwell advises, for the removal of nasal polypi by the general practitioner, a saturated solution of chromic acid, or the moistened crystals applied on cotton. Chromic acid is looked upon as dangerous when applied inside the nose, because it is exceedingly liable to spread upon adjacent parts and do great mischief. Many specialists, among whom is Dr. Seiler, refuse to use it at all, because it is so treacherous, and because there are so many safer escharotics, of which perhaps the galvano-cautery stands first. Those who use chromic acid at all, employ extreme caution; the method generally adopted is to fuse a minute quantity on the end of a probe and touch the spot where it is required, as recommended by Dr. Bosworth, of New York. Even when so used, some have had cause to regret it. It is difficult to neutralize it, and, if carbonate of potassa is used, a corrosive salt is the result. Workmen in chromate of potash works acquire perforation of the septum, sometimes after only a few weeks' exposure, so destructive is the action of even a minute quantity of the inhaled dust upon the cartilage of the septum. In the suburbs of our city lives a man with a perforated septum, the result of the application of chromic acid to an anterior hypertrophy by one of our specialists.

It would seem best for the general practitioner who feels himself obliged to operate on nasal polypi, to employ some safer weapon than chromic acid. Of these, probably the best is a reliable Jarvis snare, loaded with No. 4 or 5 imported piano-wire; for, however skilfully done, the operation with the forceps is bloody, brutal, and more difficult and painful than that with the snare. To remove polypi by Dr. Stockwell's method, the general practitioner must first provide himself with a concave head-mirror and a speculum—that of Bosworth is probably best, because it is self-retaining. A Jarvis snare will add but little to his expense for instruments. In using this, a lighted lamp should be placed at the right hand side of the patient's head, with the blaze on a level with, and slightly back of, his ear. Then the light is reflected from the head-mirror into the nostril dilated with the speculum; and finally, the size, number, and if possible the attachment of the polypi determined by means of inspection as well as palpation with a probe. Before using the probe, it is best to anæsthetize the mucous membrane of the nose by placing a pledget of cotton saturated with a four per cent. solution of cocaine in the nostrils, for two reasons: First, to prevent pain and sneezing, which might be produced by the gentle manipulations of the probe or wire loop; and second, because the cocaine contracts the turbinated tissues and thus, by enlarging the space, enables the examiner to see higher up into the anterior nasal cavities (Bosworth).

No difficulty will now be found in snaring off the polypi, without pain or the loss of more than a few drops of blood. Yet Dr. Stockwell states: "The introduction of the loop . . . is productive of more or less pain; and, after adjustment, the suffering produced by tightening and the process of removal is sufficient to prevent the patient undergoing a second torture usually necessary to clear wholly the nasal passages of morbid growths." All I can say to this is that either Dr. Stockwell has not a properly constructed Jarvis snare, or he has not mastered its manipulation; because it is the experience of most rhinologists that patients not only do not complain of the use of the snare, but express their delight at the painless and speedy manner in which the polypi are removed. It is not an uncommon thing for patients to request the continuance of the operation until both nasal cavities are clear of the obstructions; and as many as twenty-five or thirty of these neoplasms have been removed from one patient at a single sitting—a feat which it would be impossible to perform if the operation were as painful as Dr. Stockwell would have us believe. Then he tells us that it requires from a few hours to one or more days for a polypus to slough off after the application of chromic acid. In a case like the above, how many days or even weeks must be spent in doing, by Dr. Stockwell's method, what might be accomplished in a half-hour at the utmost, with the snare?

By whatsoever method the polypi have been removed, the patient should be seen at the end of a week. One of three conditions will be present: First, the wounds made by the removal of the polypi will be healed. If so, your work is done, if no other diseased condition of the nose requires your attention. Second, the removal of the lower polypi may have allowed one or more, which were wedged above the middle turbinated bone, to fall down where they can easily be seen and removed. Third, far more probably, however, an exceedingly tenacious muco-pus will be seen adhering to the middle turbinated bone. As this is removed with some difficulty, more exudes from minute openings. Introducing a delicate probe into such an opening, dead bone is discovered. Here, then, is present the condition described by Woakes. Perhaps cleavage exists, and the middle turbinated bone is divided into two parts by a crater-shaped opening from which dead bone has already been exfoliated. In this condition, manifestly, the task of curing the patient has only been begun by the removal of the polypi. Rest assured they will certainly return in a short time as long as spicules of dead bone are present to cause irritation. Treat the necrosing ethmoiditis as you would necrosis elsewhere. Remove little polypi as they sprout up, from time to time, with the snare or galvano-cautery. Try to assist nature to remove the spicules of necrosed bone by gently using the nasal curette, if they do not lie too deep. Order an antiseptic nose-wash, such as that made by dissolving Seiler's antiseptic tablets, for instance; make applications of suitable iodine preparations yourself once or twice a week. Sooner or later the spicula of necrosed bone will be exfoliated and the parts heal sound and well.

CONTINENCE: AN UNPOPULAR PROPHYLACTIC.

BY MADANA F. DE HART, M.D.,
JERSEY CITY, N. J.

The articles which have appeared in the Reporter during the last year on the Conjugal Question, on Prostitution, and quite recently on the Prevention of Conception, have been full of interest, and they show that there is much in this subject which requires investigation before the profession can feel that they have settled these vexed questions; and when right theories are established, there will, no doubt, be a long interval before these ideal conditions can be realized, for some of these truths, when perceived, may require much self-denial for their practice, as the mistakes of former generations have, without doubt, diminished our ability to think correctly, or to keep our practice abreast of our knowledge.

It would seem that there must be something fundamentally and radically wrong in the practical relation of the sexes, as the many perplexing problems which refuse to be solved would seem to prove that we have failed to comprehend nature's intention and her laws.

History teaches that the same problems which confront the physician and moralist to-day, appeared in the earliest days. Thomas in his "Diseases of Women" tells us that the literature of Gynæcology commences with Hippocrates, who devoted three volumes to it, and that in the sixth century Ætius speaks of the speculum, sponge tents, medicated pessaries, vaginal

injections and dilatation of the contracted cervix, in such a manner as to leave no doubt as to his having a thorough knowledge of many disorders and means of investigation and treatment, which, being rediscovered thirteen centuries afterward, have, in many instances, been regarded by us as entirely new.

Lecky, in his History of Morals, tells us that monogamy was the general system of marriage in Greece, and says that nature, by making the number of males and females nearly equal, indicates it as natural; and that with no other form of marriage can the government of the family, which is one of the chief ends of marriage, be so happily sustained. He further says: "It is an undoubted truth that, however much moralists may enforce the obligation of extra-matrimonial purity, this obligation has never been even approximately regarded."

Physiologists give procreation as the sole function of the generative organs, but the present discussions on this subject would seem to imply that they had been diverted from their legitimate function. The attempt to subvert nature is always fraught with difficulties, and it is only when we are running parallel with natural laws that we have peace.

Darwin tells us, in his Descent of Man, that procreation is the sole function of the generative organs in all the lower animals, and that although the males fight among themselves until many of them are exterminated, for the much coveted privilege of possessing the female, *she* is never outraged—her wishes are a law never violated, and she seems to be allowed to choose between the survivors.

With what impropriety, then, do we sometimes compare the worst men to brutes, notwithstanding the fact that the latter seem able to keep their passions in entire subjection to the highest law they know—instinct?

Lecky, in his History of Rationalism, in speaking of witchcraft, says: "There are opinions that may be traced from age to age by footprints of blood, and the intensity of the suffering they caused is a measure of the intensity with which they were believed." It sometimes seems, in looking over the history of the race, that disaster has always followed close in the wake of the belief that men's passions must be gratified at any cost. One is sometimes moved to inquire what would be the effect of continence, as it is rarely mentioned as a cure for the evils which flow so surely from incontinence; although these are so great as to keep the world in a constant turmoil. It would seem as if the objections to it must be very formidable, in view of the fact that it is a perfect specific for so many of the evils which afflict society.

This would solve the problem of Population, which agitated Malthus, and continues to distract political economists of the present day; and it would seem, in the most natural way, without recourse to those unnatural means which are considered by many as both unhealthy and immoral. Children would then be born only of healthy, loving parents, able and willing to sacrifice and work for their good. Habits of self-control would be hereditary, and a few generations of such parentage could not fail to affect the race. Infanticide and fœticide, twin horrors which now sometimes drive unwilling and unhappy mothers to violate the strongest sentiment of their woman's nature—their love of offspring—would be prevented. Prostitution, that revolting blot on our civilization, with its thousands of victims doomed to lives of abject misery and early graves, would by these peaceful means be eradicated; and syphilis, that terrible scourge which is undermining the health of the nations, would soon be an unknown and almost forgotten horror. Diseases peculiar to women, of which we hear so much, would, without doubt, be greatly diminished, and women would look forward to maternity with joy rather than with terror, as they would be better able to bear its peculiar burdens if others were removed which render pregnancy and lactation so difficult. The fear of unfaithfulness on the part of their husbands during this trying period would be taken away, and their loving sympathy, which is so precious to wives at such times, could be enjoyed without exposing them to any injurious manifestations of passion, which so frequently cause nausea and vomiting, abortions and many nervous conditions which make pregnancy and parturition a season of deadly peril.

It may be said that this is simply impossible; but the first step in any reform is to establish an ideal and work toward it. Someone has said that the aspiration of our age is the code of the next. This must first be considered desirable; then, who shall limit the possibilities of heroic manhood? Can we claim to be the highest order of creation, if we fail to rule our lives by the highest faculties? and would men, in this ideal condition, sacrifice more for

fatherhood than women for motherhood? What better opportunity could be afforded them for the exercise of their physical and intellectual strength than this conquest over themselves, which might bring more good to the race than all their triumphs over material things as shown in railroads, telegraphs and steamships?

Anything which would prevent the misery caused by lust in this world would deserve to be ranked with that other reform of which we hear so much, "the abolition of poverty." When this millennium comes, female virtue will not be outraged and cannot be sold, as there will be no purchasers; then women will aspire to attract men by other means than an appeal to their lower natures, by merely physical charms. This will bring into exercise a higher order of faculties, as there will be an opportunity for their use, and the much lamented frivolity and weakness of intellect thought to be the distinguishing peculiarity of women will give place to the wisdom and goodness so urged upon them, by the precepts at least, of those who have found them too silly for intellectual companionship.

This reform would do away with the difference in the standards of morals for men and women, which is certainly an injury and injustice to both, as men need the moral support of a public sentiment which demands purity in them, and women would oftentimes be helped by one which did not insist that one mistake, for them, was fatal. There would be less occasion for unnatural stimulants if this drain on the vitality were removed, and we should avoid the injury to health and morals which a combination of intemperance and impurity entails, not only on the participants, but on their children's children.

With this array of good results, is this not a theory worth mentioning among so many that merely palliate evils which they cannot cure?

—A death attributed to carbolic acid poisoning occurred in this city Nov. 21.

—The *Harvard Crimson*, says the *Ledger*, Nov. 24, is authority for the statement that the Yale foot-ball player who had two teeth knocked out in the Yale-Pennsylvania game, replaced the teeth and held them in place with his tongue until the game was over, after which he sought a dentist, who tied them in with a silk thread. The cord has since been taken out, and the teeth are as firm as ever.

ACTION OF CARBONATE OF LIME AND BROMIDE OF ARSENIC.[1]

BY J. S. WIGHT, M.D.,
PROFESSOR OF OPERATIVE AND CLINICAL SURGERY AT THE LONG ISLAND COLLEGE HOSPITAL, BROOKLYN, N. Y.

I desire to describe briefly some observations I have made during the present year in regard to the action of certain remedies in the treatment of both inflammatory and non-inflammatory new formations: these remedies are carbonate of lime and bromide of arsenic. I have given them separately, as well as in conjunction. I have given the carbonate of lime with a bitter tonic before meals, and the bromide of arsenic after meals. The dose of the bromide of arsenic has been one-fortieth or one-twentieth of a grain. The dose of the carbonate of lime has been from five to twenty grains. Prepared as well as precipitated chalk has been used; but for the most part I have used prepared chalk. The results obtained by these two remedies in conjunction have been superior to the results following either when given without the other.

I have given these remedies in the following cases: 1. In different forms of inflammatory enlargement, some tending to suppuration, and some tending to induration. 2. In those enlargements that are on and near the boundary line between benign and malignant formations. 3. In those growths that have been called sarcoma and fibro-sarcoma, as well as adeno-sarcoma. 4. In cases of cancer. 5. I have also used them in the treatment of elephantiasis.

The leading idea in the therapeutics of these remedies is that they have more or less power to destroy morbific microbes; and I have given them on the theory that cancer, sarcoma and benign growths are caused by special microbes that act as irritants, producing specific proliferations. The specific proliferations and the special microbes together make up the mass of the so-called new growth. And I may add that I am more and more convinced that this theory may turn out to be true, when our knowledge has sufficiently advanced.

The results that I have up to the present obtained are very encouraging; in cases of inflammatory induration the improvement has been rapid and marked, as a rule. In some cases which have partaken of the

[1] Read before the Brooklyn Surgical Society, November 15, 1888.

nature of sarcoma, complete absorption has taken place in a few weeks. Cases of fibro-sarcoma have disappeared in a few months. One case of elephantiasis has been especially benefited by this plan of treatment, combined with the local use of mercuric chloride wash. Several cases of cancer in the last stage have been relieved, and the growth has been made slower. In one case of cancer the bromide of arsenic greatly lessened the pain for months. In another the local hemorrhages appeared to cease under its influence. In a case of cancer of the stomach the pain was much relieved and the appetite and digestion improved.

I have used other preparations of arsenic in the past, but, as far as I can now judge, the bromide of arsenic is the most desirable preparation. It has up to the present given me the best results. About two years ago I treated a patient for boils; my treatment was on general principles, and my patient did not get better. A man told me that he had known pulverized egg-shells to cure such a case. I tried the carbonate of lime, in the form of prepared chalk, and my patient recovered. Since that time I have extended the use of this remedy, and have found it to be valuable. One case of carbuncle in a woman of advanced years was made very mild by the use of carbonate of lime. I have given this remedy in two cases of diphtheria, which it appeared to arrest.

I am at the present time treating several patients with these remedies. Some of my professional friends are also using them. I am sufficiently impressed with their value to bring them before the Surgical Society, and suggest that they have a fair trial.

Let me add, with his permission, that Dr. Bates, of this city, has found a new microbe in cancer tissue, and has succeeded in cultivating it.

—"In a recent serious illness of a patient stopping in British Columbia," says the *Medical Record*, Nov. 24, 1888, "Sir Andrew Clark, of London, was consulted. Wires were arranged so that there was direct communication from London to New York, and thence to the patient. For three hours he examined and advised regarding his trans-atlantic patient's condition. This is a very remarkable achievement of modern science, but we should prefer a sensible and experienced physician near by to the most eminent doctor in the world five thousand miles away."

OUR HOSPITALS FOR THE INSANE POOR.

BY HIRAM CORSON, M.D.,
CONSHOHOCKEN, PA.

In response to the suggestion contained in the Editorial on the "Care of the Insane," in the REPORTER, November 24, 1888, I desire to lay before the readers of this journal some facts bearing upon the question proposed for discussion.

There are five hospitals in Pennsylvania for the care and treatment of the insane poor; four of which are managed in the same way—by a Superintendent, so called—a chief physician—with a Board of Trustees, the latter with scarcely a vestige of power to promote the success of the institution, though responsible for whatever of wrong-doing may be charged against it. There are the "Harrisburg Lunatic Hospital," organized in 1851; the Danville in 1862; the Warren in 1880—all State hospitals—and the Dixmont, at Pittsburg—not entirely owned by the State—in them Superintendents are appointed for ten years. The Eastern Hospital at Norristown is organized on a different plan. There are thirteen trustees, who are the governing power, and the chief physician has no other duties than those which pertain to his care and treatment of the insane as physician.

There has been an increasing dissatisfaction among thoughtful people, for several years, with the management of the four hospitals first named, and at the meeting of the State Medical Society in 1887 a preamble and resolution prepared by me were read by Dr. Samuel Wolfe, a delegate from Montgomery County Medical Society, which contained a brief statement of the changes believed to be necessary in the management of these four hospitals, and a request that a committee be appointed to memorialize the Legislature for such change in the laws governing them as would promote the welfare of the insane. I was unable to be at the meeting, and some strategy on the part of those who were opposed to any changes tending to diminish the power of the Superintendents prevented the consideration of the preamble and resolution.

At the meeting of the State Society held in Philadelphia in June last, I presented them again. The three Superintendents present immediately pounced upon me and gave me a pretty severe drubbing—and, as the time for adjournment had arrived, I had almost no time for reply, and a motion to

"lay on the table" was passed, and the matter closed. Afterward a committee of thirteen persons was appointed to investigate the management of all the hospitals and make report to the Legislature, and to the State Medical Society in 1889.

The Transactions of that meeting have been published and yet there is not a word of the preamble and resolution which caused such an exhibition of ill-feeling and coarse denunciation of the author, to be found in their pages. I will not stop here to inquire by what authority the Publishing Committee dropped them from the Transactions, especially as no more important subject was brought to the attention of the Society, nor any which caused more earnest discussion.

As every word of the preamble and resolution was true, it would seem to a person of common sense to have been a proper subject for fair, dispassionate discussion. Why was it not thus treated? Because for many years the physicians of Pennsylvania have given a silent acquiescence to the assumption, so industriously claimed, that none but Superintendents were qualified to judge of the needs of the insane, or to direct their management. Physicians ignored the subject, gave it over entirely to the Superintendents, and, like the latter, regarded every attempt to effect reforms, by anyone not officially connected with a hospital, as impertinent interference.

The opinions of persons who have yielded the care of the insane wholly to Superintendents who have been too much occupied by other duties than the medical care of the insane to give them proper attention, have not convinced me that I should at once give up all efforts for reform in management, and therefore I have interviewed many persons of acknowledged intelligence, some Senators and Representatives—our law-givers—to whom the appeal for change in the laws governing these hospitals must finally come, and, without a single exception, they have favored the proposed movement.

Inasmuch as the Publishing Committee by an unwarrantable assumption of power has excluded them from the Transactions, I desire to have them given to your readers. They are as follows:

"*Whereas*, In the State hospitals for the care and treatment of the insane poor at Harrisburg, Danville and Warren, the chief physician, under the name of Superintendent, has not only the care and medical treatment of hundreds of insane patients, but is also burdened with the entire control and management of the whole institution and the large farm connected with it, buying everything necessary for the daily consumption of the hundreds of inmates, the attendants and employés of every kind, hiring and discharging them as occasion may require—in a word, attending to every detail in management—duties far more than enough to occupy all his time, without giving a thought or a moment to the welfare of his patients, thus being compelled to leave them to the care of his young assistants, to the great detriment of the poor unfortunates for whose relief the institution was created; and

"*Whereas*, There are in each of these hospitals seven or more trustees, men carefully selected because of their fitness to manage hospitals for the insane, but who, under the laws which govern the hospitals named, have scarcely the least part in the management of them, so entirely subservient are they to the Superintendent, although by the public held responsible for whatever wrong or neglect of duty may appear in the management of the institution, and what adds to their mortification is the fact that, however desirous for much-needed reforms, they have no power to effect them without permission of the Superintendent; and

"*Whereas*, The law which governs the Eastern Hospital at Norristown—also a State institution—does not create a Superintendent, but empowers its thirteen (13) trustees to have the sole control and management of the entire institution, its physicians and employés; and

"*Whereas*, The wisdom of our law-givers in thus giving the care of the institution to the trustees, and not to the Superintendent, has been grandly manifested by the success attained in the treatment of the thousands of insane who during the few years of its existence have been cared for within its walls, and by the condition of the more than sixteen hundred (1600) there at this moment—almost if not quite as many as are cared for in the hospitals of Harrisburg, Danville and Warren all combined—where, though every ward has been filled to its greatest capacity, the per cent. of recoveries has been greater than in any other of our State hospitals; and

"*Whereas*, It is the sense of this Society, this convention of physicians deeply interested in the welfare of the insane, and anxious that our State shall be second to none in furnishing to these unfortunates the

greatest attainable comfort and most efficient treatment, and believing that the change in management in the hospitals at Danville, Warren and Harrisburg, where almost everything is under the control of the Superintendent, to that of the Eastern hospital, in which the supreme authority and responsibility are with the Board of Trustees, would be an advance in the right direction,

"Therefore: *Resolved*, That a committee of —— persons be appointed by the President of this Society, to memorialize the Legislature for such change in the laws governing the three State hospitals above named as will confer on their Boards of Trustees full and exclusive power of management, and make it obligatory on them to provide that the medical chiefs and their assistants shall perform only such duties as pertain to their office as physicians or practitioners of medicine."

The Board of Public Charities published and sent to the Trustees of all the State Hospitals the following:

"FEMALE PHYSICIANS IN STATE HOSPITALS FOR THE INSANE.

"*Whereas*, There are in the medical profession thoroughly educated and experienced female physicians, who would be entirely competent to perform all the duties of Resident Physician in a State Hospital for the Insane, and

"*Whereas*, The Trustees of the State Hospitals for the Insane at Harrisburg and Norristown, and the Managers of the Philadelphia Hospital for the Insane, at Blockley, have for many years given the charge of the female insane in these institutions to Female Physicians, with the most satisfactory and gratifying results,

"*Resolved*, That the Committee urge upon the Managers and Trustees of the Hospitals for the Insane, at Dixmont, Danville and Warren, that they organize their management, as soon as circumstances will permit, to conform with the Act of June 4, 1879, which permits the Trustees of the State Hospitals to appoint "a skillful female physician, who shall reside in such asylum or hospital, and who shall have the medical control of said female inmates, who shall report to the Superintendent and also to the Trustees."

It is matter of regret that I cannot give in full the excellent remarks of Dr. Morton on these subjects, as read at Harrisburg.

In the hope that physicians will examine this subject and speak for the right, I am now content to leave it with them.

Society Reports.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, November 1, 1888.

(*Concluded from p.* 657.)

Dr. T. M. Drysdale in the chair.

Dr. Hirst reported six cases of

Puerperal Insanity.

In the last eighteen months he had seen six cases of puerperal insanity, an unusual experience for an obstetrician, since, according to Fordyce Barker, this condition only occurs once in four hundred cases of labor. Of these six, four were illegitimately pregnant; two had mania, while four presented a melancholic, apathetic appearance, and seemed indifferent to all about them. Three of the women recovered their reason; two are apparently hopelessly insane; and one died from a septicæmia which was associated with and perhaps caused the mental state. One case was sudden in its onset, violent in its manifestations, but short in its duration; the woman was told two weeks after confinement that her perineum was ruptured and would probably have to be sewed together. She almost immediately became maniacal and remained so for about three weeks. A correct idea of the most common variety of this affection, of the prognosis and the best means of treatment cannot be obtained from an obstetrician's practice, which must necessarily be small; but must be sought for in records of such cases presented by competent observers, who, especially if in charge of asylums, have to deal with a large number of them. Studies of more than 800 of these cases by Clark, MacLeod and Wiglesworth have recently been published. From them it appears that the maniacal form of the disease is the most common; that a large majority of the cases recover, usually within six months; that when death occurs it is commonly traceable to sepsis, which is so often associated with puerperal insanity, although a few cases die from maniacal exhaustion; that the best treatment is the Weir Mitchell rest cure. Heredity plays a most important part in the etiology of the disease; very often the subject is mentally and physically depressed. It seems not very uncommon for the chorea of pregnancy to develop into insanity; this happened in one of my cases.

Dr. Joseph Price exhibited specimens.

The first specimens shown were from a case operated upon that very day. He had placed them in a bath, in order that the adhesions might be plainly seen. The pavilion in both tubes was closed; there was no semblance of a fimbriated extremity; the tubes had been separated from the ovaries. He could not enucleate the ovaries in this case until the fundus of the uterus had been shelled out. He always floated the appendages in water, in order that it might be seen that there were adhesions, before the spectators left the room. A simple examination was liable to provoke harsh and often unprofessional criticism. There was a gonorrhœal history in this case, and the woman suffered greatly. The last child was born ten years ago, and since then she had suffered constantly. Locomotion was painful and difficult; stepping from a curb-stone or turning over in bed caused great pain.

The second specimen consisted of both Fallopian tubes and ovaries, illustrating the condition known as hæmato-salpinx. In shelling them out, the pavilions were opened and found to contain a coffee-colored material; the condition might be termed hæmato-salpinx, although it is not exactly what is generally recognized as hæmato-salpinx. With the fluid or concretion from a typical hæmato-salpinx a black mark can be made on a white wall.

He scarcely knew how to describe the next specimen. The peritoneum was studded with hard bodies; it was difficult to get into the pelvis. A peritoneal cyst, containing a quart or more of fluid, was opened. The tubes were adherent, large and cheesy; the ovaries were clearly cystic. The adhesions were very general, and it was difficult to start the enucleation. The pavilions were closed. In these cases, he said, the adhesions are often so strong that the ovarian tissue is torn, and he has often left a small piece of ovary on the sacrum in trying to make the separation.

Dr. William Goodell understood that the peritoneum was covered with papillary deposit in the last case. Then it must be a papillomatous cyst of the ovary, and the papillomata have either grown through the wall of the ovary to its surface or else they have developed on the surface. In these cases he had found universal infection, with papillary deposits everywhere on the peritoneum. Sometimes these growths have proved malignant, at other times benign.

Dr. W. H. Parish asked if the deposits might not be tubercular. It would require the microscope to determine their character. They looked very much like what he found in a case of tubercular deposit in the peritoneum, associated with adhesions and thickening of the tubes and ovaries. He had opened the abdomen and removed the peritoneal fluid; this had been followed by wonderful improvement. The abdominal tension and distension disappeared, and have not returned. The patient is now a well woman. Previous to the operation, she was almost bed-ridden. He would say, in regard to the specimens before him, that they do not exhibit their condition as they do at the time of the operation; and he had thought that criticism on the propriety of the operation was not altogether fair when made by men who have not seen the specimens in the fresh state. There is a great difference in the appearance of specimens when presented here, and at the time of the operation. Moreover, the inflammatory mass and the adhesions about the appendages are not fully indicated by the specimens after removal.

Dr. T. M. Drysdale saw the specimen in its fresh state. It did not then present the flattened appearance of a tubercular deposit, but had the rough warty look of a papillomatous growth.

Dr. Baer said that the specimens which had just been presented would seem to sustain him in the view which he had expressed regarding the pathology in these cases, viz., that the condition of the tubes usually met with is one of a general non-purulent inflammatory condition, rather than of pyosalpinx; for there is not one of the latter character among the specimens presented. This is the condition he usually meets with in his operations. In one of these cases the disease is said to result from gonorrhœal infection; yet it is not stated that pus was present. There is no question, however, as to the gravity of the disease and the necessity of the removal of the appendages in all but one of the cases presented, whether pus was present or not. The tubes were so hypertrophied and dilated, and the ovaries so thoroughly diseased, that it could never be hoped to cure these patients by any other means than by removal of the appendages. But the specimen which has been placed in water for the purpose of demonstrating that inflammatory adhesions really did exist, and in which the ovary and tube do not seem to be seriously diseased, deserves attention. He had himself been criticized for removing such tubes and ovaries, and perhaps justly;

for it does seem, and he believes it is true, that a patient presenting such slight disease that it is necessary to place the specimen in water to demonstrate the adhesions to a society of experts, might be cured without operation. In such a case there must on physical examination have been very little thickening of the tubes and ovaries felt through the abdominal wall or vagina; there must have been such slight evidence as to require an expert like Dr. Price and some others to determine the presence of disease. He had no doubt that many cases of pelvic peritonitis, even recurring peritonitis, are cured by spontaneous absorption of the inflammatory exudate, without treatment; but he was sure that with treatment, by rest, etc., he had cured many cases in which the tubes and ovaries have been as adherent as in this case, and even worse. In this case there must have been found very little thickening of the organs and tissues involved, as felt through the vagina and abdominal wall. He had seen such patients get well and bear children. It is always well, however, to tell the patients that the disease is liable to return, so that they may observe greater care. But it cannot be doubted that many cases of pelvic peritonitis recover entirely, and do not necessarily have a recurrence of the disease.

Dr. M. Price said that he would take great pleasure in showing Dr. Baer the next pus-tubes he removed. The specimens before him were as pretty examples as he had seen. In one case there were three abscesses in one tube, showing positively that in such cases the treatment of Martin by drainage through the vagina could not possibly do good. There might be cases in which such treatment would answer the purpose; but, where the tube is sacculated, each sac containing pus, and in addition, as a result of leakage, there are abscesses in the cellular tissue of the pelvis, it is not applicable. He did not believe these abscesses ever occurred except as the result of leakage.

Dr J. M. Baldy thought that it did not require an expert to diagnosticate such tubes as were presented and had been placed in water. The inflamed tubes are plainly and easily recognized. They are felt to the right or left of the cervix or posteriorly in the *cul-de-sac* as an irregular hard mass, which masses it was the custom in times past to diagnosticate cellulitis. When removed the specimens often looked very small. With reference to the absorption of adhesions, he did not believe that this ever occurred. He believed that a tube and ovary, once adherent, were always adherent, and that no form of treatment would produce absorption. He had seen any number of cases treated medically for years by the most skilfull men, but they had come finally to the knife. At the operation there had been found simply adherent tubes and ovaries. As far as the possibility of these cases becoming impregnated was concerned, where the disease was bilateral, such cases were simply examples of mistaken diagnosis. When the fimbriated extremities or uterine ends of the tubes are closed, it becomes a physical impossibility for impregnation to take place.

Dr. Baer said that he would be glad to examine any specimen which Dr. Price might wish to bring; but if he expected to show him in a pus-tube something that he had never seen, it would not be necessary for him to come. He then related the following case in support of his position. Six years ago a woman was sent to him, and on examination she was found to have a small circumscribed tumor attached to the posterior surface of the left broad ligament. It seemed to be and afterward proved to be an inflamed ovary which was surrounded by a mass of lymph, that fixed it in the prolapsed position which it occupied. It could not be ascertained certainly, but the tube was thought also to be fixed by the lymph mass. The patient had had a child nine years before, and subsequently means for the prevention of conception had been resorted to for a number of years. She now desired children, but sterility had followed this long prevention of conception. She was placed upon treatment consisting of rest, massage, electricity, the use of iodine, hot water, etc. She began to improve after the second or third week of treatment. The tumor, which was not larger than a walnut, gradually became smaller from absorption of the lymph around it; both the uterus and the ovary became more mobile, and within two months the ovary had returned to almost its normal size. The opposite side was also affected, but less severely. This woman has borne two children since. Would it have been just to the patient to have removed the tubes and ovaries in this case? Is it right to sacrifice the ovaries and tubes in cases of this character without first making an effort to cure without operation? In some cases, the main pathology is a pelvic peritonitis with adhesions, rather than ovarian and tubal disease. He holds that criticism is just under these circumstances.

Dr. H. A. Kelly thought that the discussion aroused by these specimens had

assumed a very important direction, and he must heartily agree with Dr. Baer; for he had often seen light adhesions of uterus and ovaries absorbed while under treatment. There is still too much *furor operandi*, and too little diagnostic precision. Men must cultivate their tactile sense more. The mere operation is often nothing. He actually had one patient under his care who was told by a doctor in August that there was a pus-sac in her pelvis, and if she did not at once consent to operation her life was in imminent danger. Being his patient, she refused to be railroaded into an operation in this way, and came to him on his return. He then found her pregnant. How careful men should be; how little is in the operation, how much in the judgment which decides it! Brandt's treatment of massage deserves careful trial in cases in which there is no fluid accumulation in the pelvis. He had long since ceased to bring specimens of freshly removed tubes and ovaries before this Society for exhibition, as it is the same old story every time, and—he was ashamed to repeat it—big tubes, adherent ovaries, pus and water or blood, intestinal and mesenteric adhesions tied off, pelvis flushed, drainage-tube. He had six cases in the past week, and except one, most difficult enucleations; but he had no new suggestion to offer. It is due to the dignity of the Society that as years go by, we should at least make some advance in our knowledge; but here we are to-day using the same terms we used three years ago—hydrosalpinx, pyosalpinx, hæmato-salpinx—describing merely the fluid contents of the tube, without any reference to the actual disease, the causative factor. What is the process which produces these final stages? And are the water, blood or pus contents of the tube the whole disease, or are other structures as well the seat of the disease? These questions are most important, both as regards prophylaxis and as regards the mere technique of the operation. We want more natural history of these diseases, and more pathology, then perhaps we would devise better ways of relieving these patients.

Dr. W. S. Stewart understood, in the case referred to by Dr. Baer, that only one ovary was involved. Might it not be possible that where the tube of one side was bound down by adhesions, the tube of the other side might have performed the proper function for both? Or that perhaps all of the functions had been performed by the ovary and tube of the opposite side?

Dr. Joseph Price was delighted to hear that it is time to cease removing healthy ovaries. He had never removed ovaries that were not diseased, for vague nervous symptoms. He should be glad to have any of these specimens examined by pathologists, and if they should say that anything could possibly pass through such pavilions he would be greatly surprised. These cases had been treated medically by the best men in the profession. The vaginal vault could be rubbed and painted, tickled with electricity for years, but this would never release the pavilion. Drs. Drysdale and Parvin were both present at the operation, and if they had any criticism to offer, he thought they would have made it. He would be glad to know of any other successful way of treating these old chronic cases, other than by removal, but he did not.

Dr. Baer, he thought, did not mean what he said about treating these patients. We may have an adherent ovary with the pavilion free. The only way in which such a case could be diagnosticated was by the history. These cases can, he said, be easily classified; they are all distinct diseases. It is folly to say that a tube containing pus is not a pus-tube; again, one containing blood—give it a better name if you can than hæmato-salpinx; so with hydrosalpinx—give it a better name if you can. If anyone can go further than Mr. Tait has done, let him do so. Men do remove ovaries for ovaralgia and so-called cirrhotic ovaries. He thought that all such operations should be condemned. It is as absurd to remove a so-called cirrhotic ovary as it is to trephine the head for clavus hystericus, in the same hysterical patient. He insisted that he operated for actual disease, and that no one had a right to touch a patient except for disease. The results of the Battey operation are not good, and it is condemned throughout the country.

Dr. Montgomery reported a case of

Vaginal Hysterectomy

with the following history: Mrs. M., a patient of Dr. T. O. Noch, 40 years old, the mother of five children and the victim of a large number of miscarriages, has been suffering for the last six years with frequent hemorrhages, which for the past few months became almost continuous. He saw her in consultation with her physician some months since, and upon examination found an excoriation on the posterior lip extending into the canal of the uterus. It was advised that the surface be touched with chromic acid, and subsequently treated with soothing

applications; if there was not rapid improvement following this course, a section should be removed for microscopical examination. Failure to arrest the disease, and the demonstration of the presence of epithelioma by the examination of a competent microscopist, led to the decision to extirpate the organ. Oct. 4, at the request of Dr. Noch and assisted by him and Drs. West, Rively and Mr. Croskey, Dr. Montgomery had performed the operation. The patient was placed in the lithotomy position, the vagina separated by retractors, and the cervix transfixed by a ligature. The vaginal mucous membrane was cut through, encircling the cervix, the submucous tissue separated to the peritoneum in front and back; the broad ligament was cut laterally sufficiently to make sure to free the ureters from injury in securing the ligaments. An opening was now made into the peritoneal pouch posteriorly and a large sponge inserted; two fingers were inserted, the fundus pushed forward and the anterior opening was completed. A pair of strong forceps so constructed as to make equal pressure in their whole length was applied upon each side of the uterus and the organ removed. Some vessels not included in the compression forceps continued to bleed, so that a number of small forceps were applied. In all, some eight forceps were applied and left hanging from the vagina. The sponge was withdrawn from the pelvis and the vagina lightly packed with iodoform gauze. The small forceps were removed at the end of thirty hours and the large ones in sixty hours. The convalescence of the patient was uninterrupted and without event. The highest temperature reached was 100°, on the third day.

Dr. Montgomery also presented a case of

Supra-Vaginal Hysterectomy.

The patient, 29 years old, married, never pregnant, has been suffering for several years from severe menorrhagia. One year ago he saw her with Dr. Strittmatter. Upon examination he found a large fibroid uterus. She presented evidence in her blanched face of having suffered from severe hemorrhage. The removal of the uterus by the supra-vaginal method was advised. She was advised by her friends to consult other parties, who informed her that such an operation would be certainly fatal, and advised the removal of the ovaries. The hemorrhage still continuing, she went to Dr. Strittmatter's private hospital, and at his request Dr. Montgomery performed the operation, in which he was assisted by Drs. Strittmatter, Moylan and Messrs. Starkey and Sangree, medical students. An incision about six inches long was made and the tumor was with difficulty lifted up. The ovaries were enlarged, cystic, adherent and behind the uterus. The removal of the uterus was more readily accomplished than would have been the removal of the ovaries. For the purpose of returning the pedicle, the neck of the uterus was surrounded with a rubber ligature and the tumor removed, leaving two large flaps; these were sewed together by a number of continuous sutures of catgut until the flaps were completely coapted; upon the removal of the ligature, however, there was so much bleeding that it was thought better to use the Tait clamp. The peritoneum was sewed fast to the stump of the uterus below the clamp. One ovary had been removed and the other, owing to extensive adhesions, was permitted to remain. The wound was closed with silkworm gut, dusted with iodoform and covered with iodoform gauze and absorbent cotton. She stood the operation fairly well and suffered but little from shock; the following day the temperature was over 104°. Believing it to be due to the dressing, Dr. Strittmatter applied a carbolized gauze dressing and the next day the temperature was 99°. The subsequent convalescence was all that could be wished for, and the wound has now healed with the exception of the lower angle where the stump was fastened.

Dr. Montgomery read the history of a case of

Tubal Pregnancy

for Dr. Noch.

Mrs. ——, 28 years old, married, has had four children, labors normal. Had menstruated regularly until August 17 last, with no evidence of it since that time. The patient thought herself pregnant and felt nothing unusual. She arose one morning from her bed and fell to the floor. She went back to bed and, not improving any, Dr. Noch was sent for. He found her with a very pallid, pinched, and wax-like condition of the face; body and extremities cold and perspiring. Respiration was very rapid and shallow, and the breath cold. Heart's action was regular but very weak; pulse small and compressible and very rapid; temperature under 94°. There was marked stupor, but she could be aroused, with difficulty, to answer questions. The uterus was somewhat enlarged, cervix slightly softened, and there was a gradual

oozing of a coffee-colored fluid from the os. She had very little pain but felt extremely weak. Her whole appearance indicated internal hemorrhage. The diagnosis of tubal pregnancy with rupture was made. Laparotomy was considered, but deemed useless for fear the etherization would cause heart-failure and death on the table. Diffusible stimulants were freely given and the local application of heat was used in the hope that reaction might occur and laparotomy be possible. She continued to fail and died at 10.30 P.M., never having recovered from her shock. The post-mortem showed an abdomen filled with blood-clots. A small fœtus was found in the left inguinal region, floating in its sac, which was still unruptured. The tube was found to be ruptured midway between the uterus and ovary, leaving the placenta still in the tube. Development had advanced to about the 7th or 8th week.

Dr. Montgomery then exhibited a clamp he had devised for clamping the broad ligaments in cases of vaginal hysterectomy. The two blades were each grooved and could be closed with a parallel motion. They were joined at the top by a permanent joint. The surfaces of the blades were long enough to include the whole ligament in one grasp.

Dr. Wm. Goodell was sorry he had overlooked the fact that Dr. Montgomery had a case of this kind to present. He should like to have brought a pair of Doleris's forceps which he received through the kindness of Dr. Lusk. It is a clamp analogous to the one shown, but it has the obstetric lock. The blades can be disarticulated and one of them ends in a short hook by which the broad ligament is caught at its upper edge and brought down. He had not had occasion to perform the operation since he had received the clamp, but he had had two cases, one of which was fatal. The operation with the ligature was a tedious one and the use of the clamp must shorten it. He believed that we were indebted to Richelot for the clamp.

Dr. J. M. Baldy asked how Dr. Montgomery would apply his clamp. It was much like the one figured in Greig Smith's book, except that it was permanently locked above at the joint; while Smith's could be taken apart, one blade introduced on each side of the ligament and then the joint made above. He could not see how this one could be easily applied unless the abdominal cavity were opened and it were slipped down from above.

Dr. Parish had seen the description of a clamp with separable blades, the deviser of which he could not recall. One of the blades has a long fenestrum open at the distal end, and the other blade fits into this open space. This gives uniform compression of the broad ligament. With the instrument shown the compression may not be uniform.

Dr. Montgomery said that in the majority of cases there was not much infiltration of the ligament. After cutting the ligaments in the manner described, the uterus can generally be readily everted, the fundus of the organ brought to the vulvar orifice, and the clamp applied from the outside. Even in those cases in which the ligament is not readily drawn out, he saw no reason why the instrument should not be pushed into the abdominal cavity and one blade brought down on each side of the ligament. If the instrument were clean it would do no harm to the peritoneal cavity.

Dr. Baldy said that the specimen of tubal pregnancy was interesting, as demonstrating Tait's theory of the pathology of extra-uterine pregnancy. Tait holds that rupture takes place into the broad ligament, and that the fœtus then goes on to develop, or a secondary rupture subsequently takes place into the abdominal cavity. This process is most beautifully shown in this specimen. The cavity of the tube and broad ligament form one and the rupture has taken place into the peritoneal cavity.

Dr. H. A. Kelly described some

Glass Catheters.

Some five years ago he was hard pressed to catheterize a woman suffering from a distended bladder; not having his catheter with him, and being at some distance from his office, he took the crooked glass tube out of the baby's feeding-bottle, and drew the water with perfect ease. Since that time he had more or less constantly used glass catheters, which he had had constructed for the purpose. He placed far more confidence in the glass than in the metal catheters. The manifest requirements of a good catheter are that it should be easy to introduce, draw the water quickly, and be readily cleansed afterward. The first two requirements are readily answered by any material of which catheters are commonly made. In the last lies the difficulty. It is impossible to be sure that the inside of the catheter is clean. He has hitherto directed his nurses in his hospital, where the catheter is in constant use, to keep

them, when out of use, in boiling water. He is now using glass catheters constructed like those he exhibited. They are very cheap, safe (never breaking when in use), and cleansed with ease and certainty. In a hospital a number can be kept standing in a jar containing a disinfecting solution. The device of catheterizing with a glass tube is so simple that he was sure many present, as well as elsewhere, must have resorted to it long before this. He was also not surprised this summer, when he found well-made glass catheters for sale at the instrument-makers' in Berlin. He presented two patterns, which were sold at twenty-five cents each.

ITALIAN SOCIETY OF INTERNAL MEDICINE.

FIRST CONGRESS, AT ROME, OCT. 20 TO OCT. 24, 1888.

The organization of this Society has taken place quite recently, and has been brought about by the coöperation of all the professors of Clinical Medicine of the Italian Universities. The Congress has been quite a success. About five hundred physicians attended its meetings.

Saturday, October 20.

President's Address.

The PRESIDENT, DR. BACCELLI, of Rome, after having welcomed the members of the Congress, spoke of the great progress which has been made in these last years in experimental medicine; he said that such a meeting as the present was exceedingly useful, as it united professional men who cultivate synthesis in the great and extensive field of clinical studies. In practice one must take everything that is useful; but there are three branches at present before us, which claim all our efforts and attention, namely, bacteriology, therapeutics, and neuro-pathology.

In regard to bacteriology, we shall soon know, it is hoped, what we may regard as pathogenous or specific. Extensive researches, however, are still necessary to bring about this result. In regard to therapeutics, we are in a very excitable period; the number of new drugs is enormous, and is increasing every day. I think this is due to the creation in Italy of "Therapeutical Clinics," which too often lower the human being to the rank of an animal on which experiments are performed.

Neuro-pathology, by the localization of the cerebral centers, opens a new way to the explanation of the numerous diseases which have their origin in the central nervous system.

PROF. TOMASELLI, of Catania, read a paper on

Quinine Poisoning, or Ictero-hematuric Fever,

in which he said he had observed, during the past year and in many instances, that in certain malarial patients, under certain conditions, quinine did not have any marked action on the malarial condition; but, on the contrary, brought on a special kind of intoxication, the prominent symptoms of which are fever and hematuria. He has observed that this intoxication is more liable to present itself when there is a chronic or acute malarial condition, and a depressed state of the patient. The symptoms produced occur from one to six hours after the ingestion of quinine, while the patient is free from fever; he is suddenly taken with a marked chill, which in one or two hours brings the fever up to 106°.7 to 108°.5 Fahr.; then vomiting sets in, with diarrhœa and a great desire to urinate, the latter accompanied by the passing of bloody urine. Sometimes a jaundiced condition presents itself at the same time. This paroxysm usually lasts twenty-four hours, and terminates by a fall of temperature. The symptoms just mentioned gradually disappear, but the patient is left in a very weak condition, and remains jaundiced, if this complication has occurred. If quinine is not stopped and these paroxysms are allowed to recur, the patient falls into collapse and dies. The post-mortem examinations have proved that the blood is the chief seat of the disease; the red globules are discolored and reduced in number when compared with the number of white corpuscles. The urine is red, bloody, contains biliary coloring matter, epithelial cells, altered red corpuscles, and fibrinous casts. Hemoglobinuria is also more frequent than hematuria. This ictero-hematuric fever is often mistaken for a fever met with in Algeria, which, however, is a malarial ictero-hematuric fever; it is also confounded with hemoglobinuria due to cold. This disease must also be distinguished from the form described by Bretonneau, which occurs in patients who have received very large doses of quinine that have produced great gastro-intestinal disturbance. It is also to be separated from the quinine fever of Zimmermann, described

by this last author, and found in those persons who pulverize cinchona bark.

The disease described by Tomaselli is due exclusively to the preparations of quinine, which have a dissolvent action on the blood and decompose it very rapidly; there is a destruction of the red blood corpuscles, and an elimination of hemoglobine. Dr. Tomaselli, although not opposing altogether the use of quinine in the treatment of malarial diseases, thinks that in certain cases even very small doses of the remedy may produce dangerous symptoms; in such cases one must not hesitate to use other remedies against the malarial poison.

Dr. Bozzolo, of Turin, asked if Dr. Tomaselli had observed in the red globules the plasmodium studied by Marchiafava and others.

Dr. Carderilli, of Naples, does not think that quinine intoxication is found only in malarial patients; he records a case in which a very small quantity of quinine would produce hematuria in a case of pseudo-leukæmia, which presented no traces of malaria. He does not admit that icterohematuric fever is a result of the treatment with quinine, for he mentions an epidemic that occurred lately in which this disease was observed, although some of the patients received no quinine at all. He thinks that the fever is of a special order, the origin of which has not yet been discovered.

Dr. Giuffré, of Palermo, has observed two malarial patients, who presented hemoglobinuria immediately after the administration of quinine.

Dr. Marchiafava, of Rome, has often observed the ictero-hematuric fever in the hospitals of Rome, where there are a great many malarial patients. There is no doubt as to its malarial origin. These fevers, contrary to Dr. Tomaselli's statements, have been cured with quinia. The important fact is that the symptoms disappear under the influence of the preparations of quinine, whereas the contrary would be the case if they were due to quinine intoxication.

Dr. Maragliano, of Genoa, said that as we find in malarial patients an alteration of the thermic centers, with involvement of the nutritive function of the blood, it is not impossible that in certain patients the action of the quinine as observed might be quite contrary to what it usually is; that is to say, by its action on the thermic centers which are acting badly, it might produce a rise of temperature; and by its action on the blood, which is very much altered, hemoglobinuria might be produced.

Dr. Baccelli, of Rome, said he did not accept the name quinine intoxication; for, should it be a real intoxication, we should observe it in every case, with the same rapidity and the same severity. He also calls attention to the fact that certain malarial fevers have for their principal symptoms hematuria and jaundice, which, instead of becoming worse, disappear under the influence of quinine. Still he admits that some patients, suffering from malarial disease and presenting hematuria and jaundice, might find their condition aggravated by the administration of quinine; but these are rare cases.

Dr. de Renzi, of Naples, read a paper on the

Treatment of Pulmonary Tuberculosis,

and said that in Naples, one-quarter of the mortality must be attributed to phthisis. He has tried every known method against the disease. From his experience, he found that preparations of iodine, as well as sulphurous inhalations, have given him the most satisfactory results. He has used with great success inhalations of sulphurous acid gas as well as of sulphuretted hydrogen, and has found that these agents have greatly decreased the oppression as well as the continuous and troublesome phthisical cough. Iodoform has been found by him very useful in diminishing cough, expectoration, dyspnœa, and in reducing the temperature; he has been very successful in diminishing the diarrhœa of phthisical patients by giving inhalations of iodine dissolved along with iodoform. All that can be done up to the present, he thought, is only palliative; he has administered alkaline carbonates as he has noticed that the blood of phthisical patients has lost some of its alkalinity; but he has not obtained any marked benefit to his patient by their use. In an experimental way, he has also found that when he inoculated guinea-pigs with the tuberculous virus, and then submitted some of them to inhalations of iodine, those which inhaled the iodine lived much longer than those which did not undergo the treatment, although finally they all died.

Dr. Pettoruti, of Naples, thinks that enemas of sulphuretted hydrogen can be very useful, when administered in the early stages of the disease; and he records two cases in which the physical signs entirely disappeared under this treatment, and he considers his patients cured.

Dr. Riva, of Parma, has studied espe-

cially the three surgical methods of treatment of pulmonary tuberculosis: pneumectomy, pneumotomy, and the interstitial or direct injections of substances into the lung tissue. The first method, or pneumectomy, he does not think advisable; for the extirpation of a part of a lung has not, up to the present time, prevented a recurrence of the disease, for when the operation was undertaken the neighboring peribronchial glands have all been more or less involved, and the total extirpation of the lung, under such conditions, would only be a remarkable surgical operation, but without any benefit whatever to the patient; on the contrary, this method could only be resorted to with propriety in the early stages, when the disease is entirely localized. But it would be a very difficult matter to find a patient who would consent to run the risk of his life at such an early stage of the disease by submitting to this formidable operation.

The second method, or pneumotomy, should also be resorted to as soon as a pulmonary cavity is discoverable; but is it not then already too late to interfere? Of all the cases he has collected he only found that in one-fifth of the total number of cases was there a temporary amelioration or great diminution of the frequency of the cough, reduction of the temperature, or an increase in the general weight of the patient.

The third method, parenchymatous intrapulmonary injections, he has resorted to in many cases, with good results in some, but never a complete cure. The object in view with such injections is to produce a cicatrization of the pulmonary cavities, or to destroy the tubercle bacillus. For the cicatrization of the pulmonary cavities he thinks the injections useless, for in using them some of these cavities are sure to be omitted; hence the treatment remains imperfect. For the destruction of the bacillus, he thinks these injections might be useful if a sufficient quantity of the antiseptic liquid is injected, so that the parts injected are perfectly saturated with it. He has injected from two and a half drachms to six and a half ounces at a time. To this process he gives the name "pulmonary inundation," which it really is. To enable patients to resist the injection, however, only fifteen minims must be injected a minute. He has never obtained one single cure, but he has observed marked relief, due to suppression of the cough and pain, marked improvement from the pre-existing dyspnœa, reduction of temperature, and increase of weight, of appetite, etc. The solutions used were of corrosive sublimate and camphorated chloral.

Dr. Ampugnani, of Catania, and Dr. Sciolla, of Genoa, presented the result of their experiments with inhalations of hydrofluoric acid. They have had very good results; the skin and mucous membrane did not seem to be affected by this agent.

Sunday, October 21.

Prof. Bozzolo, of Turin, read a paper on

The Etiology of Pneumonia,

in which he said that in accordance with the results obtained at the laboratory of the University of Turin, he had arrived at the conclusion that pneumonia, which is regarded as a contagious, epidemic, infectious disease, is due to the presence of two schyzomycetes—Friedländer's streptococcus and Fränkel's diplococcus. Out of a series of twelve experiments on the living expectoration, he has been able to isolate the diplococcus of Fränkel in eight cases, but never has isolated Friedländer's streptococcus. In addition to these he has also seen the staphylococcus pyogenes aureus and citreus; from his experiments he attributes the principal *rôle* in the etiology of pneumonia to Fränkel's diplococcus. Dr. Bozzolo also thought that pneumonias, which have not for origin Fränkel's microörganism, differ both in their pathological anatomy and in their symptomatology from the ordinary fibrinous pneumonia.

Drs. Sciolla and Trovati, of Genoa, have obtained blood from a pneumonic patient and have introduced the same directly into the heart of an animal, and have found that it had a toxic effect, probably on the cardiac muscle and its contained ganglia. Moreover, they have observed that this poison can still be found in the blood of pneumonic patients when the fever has disappeared. They recommend, as a rational treatment of pneumonia, several blood-lettings, which take away each time directly a certain amount of the poison.

Dr. Lucatello, of Genoa, has found that the serum of the blood of pneumonic patients is sterile, and he explains this fact by the secretion of toxic substances by the pathogenous microbes.

Dr. Maragliano, of Genoa, read a paper on the

Treatment of Pneumonia,

in which he drew attention to the fact that,

the infectious nature of pneumonia being admitted, efforts must be directed to the elimination, if possible, of the toxic substance which has a tendency to paralyze the cardiac muscle.

Although the disease has a regular course to run, he does not recommend expectation, but thinks the patient must be sustained all the time to enable him to pass successfully through the dangerous period. He is opposed to direct injection of solutions of corrosive sublimate into the lung, which he has done himself, but without any marked benefit. He recommends blood-letting repeated two or three times during the course of the disease; from three to six ounces of blood are taken away with remarkable benefit to the patient; out of twelve patients he has treated in his medical clinic, he has had not a single death. He thinks, with the preceding speaker, that the occasional abstraction of a certain amount of blood takes away at the same time a certain amount of toxic matter, and so checks cardiac paralysis, and at the same time reduces the blood-pressure. He is opposed to giving ipecacuanha in the early stage of the disease, for he thinks it diminishes the force of the heart; he prefers digitalis and strophanthus, with small but repeated doses of alcohol; he also gives very light food. Against fever and the nervous symptoms he uses cold baths at 86° F., reduced gradually, by the addition of cold water, to 68° F.

Dr. Cantani, of Naples, states that the dangers of pneumonias of different origins are cardiac paralysis and the infectious cause. He does not think, with Prof. Maragliano, that the small quantity of blood which is abstracted from the pneumonic patient by blood-letting is sufficient to prevent the action of the toxic agent which the blood contains; he would admit blood-letting if the pulmonary veins could be bled directly, but, not being able to do that, he rejects blood-letting except when there is a high blood-pressure.

Dr. Sonsino, of Pisa, said that if blood-letting could make the toxic products disappear from the blood in pneumonia, why should it not be used in every infectious disease? But such treatment only weakens the patient, without benefit to him.

Dr. Bianchi, of Florence, has observed that in pneumonia the right auricle is especially enlarged; in children even he has found the heart increase; he has verified this fact by intracardiac injections of water in post-mortem examinations, producing a large dilatation of both right ventricle and auricle. He advises blood-letting in these cases, especially in children.

Dr. Hippa Felice, of Sardinia, said he did not believe in the modern bacterial theories. He obtains good results in his practice by one or several blood-lettings, or the local abstraction of blood by means of leeches.

Dr. Serafini, of Pisa, has made the following experiments: He has injected from fifty to sixty minims of a culture of Friedländer's pneumococcus into two sets of dogs; some of them were bled, while the others were left alone; all the first died, while those which were not bled lived.

Dr. Baccelli, of Rome, said that blood-letting must be reserved for very serious cases; he recommends the inhalation of oxygen in the period of asphyxia of this disease, having obtained very good results from its use.

Dr. Roncisvalle, of Catania, has found, in several cases of pleurisy, the presence of the diplococcus and streptococcus of pneumonia; he concludes from his observations that certain pleurisies are of an infectious character.

Prof. Maragliano recommends and uses ipecac only at the period of the paralysis of the bronchi. In regard to bleeding, he says that no one has yet demonstrated that blood-letting is harmful. The pneumonic patients do not use up their red blood-corpuscles more than phthisical patients; hence a certain quantity of them may be abstracted if it is found necessary and useful.

(*To be continued.*)

NEW YORK ACADEMY OF MEDICINE.

Anniversary Meeting, November 15, 1888.

The President, A. Jacobi, M.D., in the chair.

The President explained that it was the custom of the Academy once a year to invite the public at large to a meeting at which some representative man in the profession would deliver an address of general interest, and to call the attention of the people to the work done by the Academy and the purposes it was to fulfill. Many of the invited guests availed themselves of the opportunity presented to inspect the halls, and large library which is always open to the public as well as to the profession.

Dr. D. B. St. John Roosa was then introduced. He had selected as the subject for his discourse:

How to Effect Unity in the Profession.

He showed that no dissensions divided the profession in the State of New York during the first part of the century; that it was not divided into schools, but that all who were permitted to practise in the State went under no other title than that of Doctor. The State Society and the County Societies were a part of the legal machinery of the State; and there were not, as now, a Homœopathic State Medical Society, an Eclectic State Medical Society, as well as that to which the doctors present belong. These divisions had arisen from contentions which had served no good purpose, but had done incalculable harm. Had the members of the county societies not undertaken to expel those who were legally qualified to practise, and had been educated with themselves in good medical schools, simply because they did not agree with them regarding theory and practice, the profession in New York would have remained a unit. The trouble arose not from attempts at restricting ignorant Thomsonians, or eclectics as they were now called, but those who were well educated, yet who were not supposed to be orthodox on therapeutics and theory regarding the action of medicines. Our forefathers might have been able to judge what constituted orthodoxy in this respect, and whom to declare heretics; but to-day it would be difficult to draw the dividing line. Some of the accepted remedies and theories of practice of our forefathers now appear to the profession little less absurd than those of sects whom they cast out.

It was a mistake, he said, to permit medical colleges, notwithstanding their present advanced rank, to send out graduates who are required to pass a further examination before being allowed to practise in the army and navy or public hospitals, and yet who can at once enter upon the duties of a physician in relation to the general public. There should be a State board of medical examiners, such as has been suggested by the Medical Society of the State of New York at its last two meetings, urged by Dr. Loomis, the late President, and by the counsel of the Medical Society of the County of New York, Mr. Purrington. The legally established colleges should retain the privilege of conferring the title M.D. on their graduates, but none should be permitted to practise in the State without first passing an examination before a State board of medical examiners. Thus there would be a uniform educational qualification relating to the branches which are at the foundation of medicine—anatomy, physiology, surgery, and chemistry; while regarding therapeutics and theory there need be no undue restrictions. In thus pointing out the means of effecting the unity of the profession, Dr Roosa referred only to the State of New York. Speaking of collegiate education, he said he did not believe in exacting a Greek and Latin course, nor in compelling the student to spend too many years at college before entering upon the study of medicine. He believed President Barnard's view would prove the correct one—that in time there should be a few universities or colleges, such as Yale, Harvard, and Columbia, while the many now in existence should be preparatory; and from these, students could pass at once to the medical or law school.

PERISCOPE.

Traumatic Aneurism in a Child.

In the *Indian Medical Gazette* for July last, an interesting case of traumatic aneurism in a child under one year of age is recorded. The patient, a girl, eleven months old, while at play, fell upon the floor, sustaining a bruise on the left cheek, which was followed subsequently by the development of a large pulsatile tumor of the size of a hen's egg. The health of the child in no way suffered from the swelling until one day when she accidentally scratched the skin covering it with her nails; inflammatory symptoms supervened, and a medical man ordered poultices to be applied, subsequently puncturing the tumor. Alarming hemorrhage followed the puncture, which could not be controlled. When Mr. Bose, who records the case, was summoned, he found the child almost bloodless. The dressings were removed from the wound and the clots turned out; the small malar branch of the facial artery was feebly spouting, and was at once twisted. The soft parts around the wound were sloughy. The following morning it was seen that the hemorrhage had still continued; the sloughing process had spread to the outer canthus of the eye. A consultation was held, and it was decided to adopt further measures. The facial artery was tied, the inflamed tissues were freely incised, all the clots were removed, and the wound dressed with boracic ointment. The hemorrhage then ceased, but the child died at the end of three days.—*Medical Press and Circular*, Oct. 10, 1888.

Surgery of Abscess of the Lung and Empyema.

In an address on the surgical treatment of abscess of the lung and empyema, delivered before the British Medical Association, at its meeting in Glasgow last August, M. T. Pridgin Teale spoke of the following points as gradually becoming clear in the surgery of the chest.

1. We are losing our fear of exposing the pleura and the lung, just as we have learned step by step how to deal boldly and safely with the peritoneum.

2. The evil of admission of air into the pleural cavity is not the mere exposure of the pleural surface to the air, is not that the lung collapses by the mere admission of the air, but that where there is a fairly healthy lung and pleura, the inrush of air reduces to a serious extent the mechanical power of the thoracic wall over the function of inspiration.

3. That in cases in which this mechanical difficulty threatens the life or impedes the recovery of the patient, surgery must decide upon the best method of closing the wound to the inrush of air, whilst allowing adequate drainage of any pus cavity to be carried on.

4. That the region of the diaphragm is a situation in which abscess amenable to surgical treatment frequently occurs, such abscesses often commencing below the diaphragm, and tending to discharge through the diaphragm and through the lung.

5. It seems probable that such abscesses can be more safely attacked through the lower angle of the thorax, provided there is dulness at the seat of puncture, than through the abdominal wall

6. As to washing out the cavity of a large pleural, or pulmonary, or hepatic abscess, it is probable that antiseptic washing is of value in the early period, whilst the cavity is offensive ; but that, as soon as the secretion has become sweet, washing is not only unnecessary, but tends to disturb the comfort of the patient, and retard his progress. If drainage is effective, so that fluid does not lodge, the fluid, which is sweet when secreted, should escape from the cavity before it has time to deteriorate

7. As to the question of excision of portions of rib in treating empyema, on this point I am unable to speak from personal experience. The tendency of surgical opinion seems to be rather to reserve it for special and exceptional cases than to make it a general rule of practice.—*British Med. Journal*, Oct. 13, 1888.

Treatment of Diabetes with Large Doses of Codeine.

Bartolomé Novaro (*Deutsche Medizinal-Zeitung*, No. 80, 1888) speaks very favorably of codeine in large doses in diabetes. Of 12 diabetics treated by him with codeine, 7 were cured, 2 improved, 2 died, and in one the treatment was without effect. One of the patients that died had diabetes in a very severe form, and succumbed to pneumonia. As to the method of giving the codeine, he states that fifteen grains of codeine were made up into twenty pills, of which three were taken on the first day. If they were well borne, without headache, immoderate sleep, etc., then on the following day one pill more was given, and if tolerance continued, on the third day still another, so that the patient very quickly reached the daily dose of four and a half grains. This dose was the usual average dose, which was increased or diminished by and bye, according to the tolerance of the patient, to the symptoms produced, and especially according to the quantity of the urine and of the sugar contained in it. He divides the results obtained into three classes: 1. The sugar wholly disappears, and so do the polyuria and the thirst. If this result follows, the author continues the treatment for two or three weeks longer. If no sugar then occurs, the number of pills is gradually reduced by one, until only one a day is taken. Subsequently, this one pill is given only every second, third and seventh day, so that only one a week is taken; and then finally, the codeine is stopped entirely. 2. When the sugar in the urine decreases absolutely or relatively, but the improvement is less perceptible than in the first case, each week the daily number of pills is increased one, to determine the tolerance of the patient. Only in rare cases is it necessary to advance to a daily dose of ten pills (seven and a half grains), as in general the sugar disappears sooner, or some symptoms indicating the point of tolerance occur, which do not permit further increase of the dose. If the patient has completely recovered, he proceeds as in the first case. 3. If neither the sugar in the urine nor the quantity of urine diminishes, the dose of codeine should be increased as long as this is possible.

As to the method of action of codeine, he believes that it checks the increased production of sugar in the human economy through a sedative action, with the aid of the nervous system, upon the glycogenic power.—*Wiener med. Presse*, Oct. 21, 1888.

THE

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PELVIC INFLAMMATION AND ABSCESS.

The present status of this subject is an illustration of the fact that knowledge may be acquired, forgotten, confused, re-acquired and placed on an enduring basis. The conflicting theories as to the relative frequency of cellulitis and peritonitis, of phlegmon of the pelvic cellular tissue and ovary, and of collections of pus within the tubes and the cavity of the pelvic peritoneum, seem destined to early and final settlement.

The Ancients appear to have had no definite knowledge of pelvic inflammation. Puzos, in 1743, regarded it as a milky deposit, a metastasis of milk. Doherty and Churchill, in 1843, wrote on chronic inflammation and abscess of the uterine appendages, without defining the tissues involved in the morbid processes. Marchal, a year later, described the existence of abscesses in the sub-peritoneal connective tissue, sub-aponeurotic space, ovary, and the cavity of the pelvic peritoneum. Noust, in 1850, insisted that all inflammatory swellings in the pelvis were located in the cellular tissue, and that the peritoneum was not involved, and designated the process by the term periuterine phlegmon. Bernutz, in 1857, on the other hand maintained, on the ground of clinical and *post-mortem* evidence, that the pelvic inflammations coming under his observation occurred at the expense of the pelvic peritoneum, and that the cellular tissue was not to any extent invaded. He acknowledged the existence of phlegmons of the broad ligament, but considered that they should be studied with phlegmons of the iliac fossa, of which they form an interesting variety. Bernutz reports thirteen autopsies in non-puerperal women, in nine of whom one or both tubes contained pus; in two of the cases he found tuberculous deposits, and in four the ovaries were healthy. In a number of the cases the tube was adherent to the ovary, the fimbriated extremity occluded and the fimbriæ destroyed; while adhesions were found binding the displaced organs in various relations.

According to Wylie this is the accepted teaching to-day—and it has been made plain in the past two or three years by hundreds of operations for the radical cure of a large class of cases which until recently were regarded and treated as cases of chronic cellulitis. It may be considered as demonstrated that in the vast majority of cases what is known as pelvic inflammation consists in salpingitis with secondary peritonitis and ovaritis, and that this is especially true in women who have not borne children. In some cases the subjacent

connective tissue is more or less involved secondarily; but pelvic cellulitis, pure and simple, is a very rare disease. It occurs most commonly—when it occurs at all—as pointed out by Bernutz, during the puerperium; and it tends to pursue an acute course ending in resolution or abscess. The inflammation is seldom confined to the cellular tissue, but also involves the endometrium, the mucosa of the tubes, and the pelvic peritoneum. It sometimes follows operations on the vagina or cervix uteri; but recent *post-mortem* examinations show that under these conditions the septic inflammation usually spreads through the tubes to the pelvic peritoneum. Cellulitis also occurs as a result of laceration of the cervix, of pelvic hematoma, and of ulceration of the bladder and rectum.

If we consider a collection of pus within the cavity of the pelvic peritoneum an abscess, then, as far as he went, Marchal de Calvi was right in his classification of pelvic abscesses; but if by the same license we consider a collection of pus within the lumen of the Fallopian tube an abscess, he omitted the most common variety, namely, pyo-salpinx. We are aware that some disciples of Tait, especially in this city, go so far as to deny the existence of phlegmon and abscess of the pelvic cellular tissue, and this in spite of the testimony of reliable and trustworthy men, though they admit that, in some cases, the distended tubes rupture into the cellular tissue of the broad ligament, thus forming a secondary abscess. Aside from reliable evidence collected in the past, their claims are refuted by the reports of cases in which laparotomy has been done, and the tubes found healthy, although abscess of the pelvic cellular tissue was present. Such cases have been reported in this city by both Parish and Longaker.

In the light of our present knowledge it seems plain that in cases of so-called pelvic abscess arising independently of puerperal processes, the pus will be found most frequently in the tubes, less frequently in the ovaries or cavity of the pelvic peritoneum; and in rare instances in the pelvic cellular tissue through leakage of pus into the cavity of the broad ligament. This is also true in cases occurring after labor or abortion, but in these cases cellulitis and abscess are far more likely to complicate the salpingitis and peritonitis, and especially so in the virulently septic, fatal cases. Cellulitis and abscess occur after labor and abortion, with slight secondary peritonitis—corresponding to the pleurisy which complicates pneumonia. Cellulitis and abscess occur at times independently of puerperal processes, as a result of hematoma, injuries, ulceration of the bladder and rectum, and some other conditions.

THE TREATMENT OF WOUNDS WITHOUT DRAINAGE.

At the last meeting of the German Surgical Society, Dr. Rydygier, of Cracow, described a method of treating surgical wounds which he has used with great success in his clinic. He devotes great care to the thorough disinfection of the field of operation and of the operator's hands and instruments. He uses only the mildest and most unirritating disinfectant solutions for irrigating the wound, and leaves as little blood behind as possible, not because blood, in itself, does any harm, but because it furnishes too favorable a nutrient fluid for micro-organisms. He sutures the edges of the wound loosely; and covers them with several layers of cheese-cloth impregnated with iodoform or corrosive sublimate, which are soaked in a 1 : 1000 solution of corrosive sublimate and squeezed nearly dry just before their application. In case of operations which create a cavity he next applies carefully graduated compression, with gauze or cotton, so as to reduce the cavity made by the operation to the smallest size possible, and ends with a dry dressing.

This method is only applicable to cases

in which union by first intention may be reasonably anticipated; but Rydygier has used it in forty major operations with very satisfactory results. In six cases union by first intention did not follow; but the patient did not suffer any harm, and it only became necessary to resort after all to drainage.

It is interesting to note in many of the attempts which have been made of late, especially in Germany, to simplify the treatment of wounds, that the most successful efforts have been in the direction pointed out by that clear-headed man and excellent surgeon, the late Mr. Sampson Gamgee. Before the day of the spray and carbolized dressings, Mr. Gamgee, and those who fully understood the principles of his methods, obtained the most admirable results in the treatment of surgical wounds with what he described as graduated compression, and dry and infrequent dressings. It is our conviction that much of the success of modern surgery is attributable to an unwitting application of the principles which he believed in so firmly and advocated so warmly, and that the most important details of the so-called antiseptic methods are those which are in harmony with these principles. This opinion may seem to be at variance with the impression created by the details of certain very successful methods, in which there is very little appearance of dryness; but on analyzing them it will be seen that the lavish use of fluids which they require does not in the least affect the principles which Mr. Gamgee advocated. The profuse washing of wounds, where fluids are most freely used, is but preliminary and preparatory to the dry and infrequent dressings which follow; and abundant experience demonstrates the fact that when fresh-cut surfaces have been made surgically clean the best results may be obtained by imitating Nature's method of sealing up a wound with a blood-crust, and letting it take care of itself.

This is the principle which underlies many of the most recent efforts to simplify the treatment of surgical wounds, and it seems worth while to direct attention to this fact as we record their successes, and recommend them to the notice of our readers.

LICENSE TAX ON PHYSICIANS.

It is reported that the City Council of Salt Lake City has recently ordered a license tax to be imposed upon all persons practising medicine in that place. This action has very naturally excited opposition on the part of the physicians, and they have presented a temperate remonstrance, which contests the argument that the tax will tend to elevate the standard of medical practice.

The Salt Lake Medical Society voices the sentiment of the medical men of the city in stating that a license tax is about the worst scheme which could be devised for this purpose, as it substitutes a money consideration, which none could furnish more easily than unscrupulous pretenders, for a test of mental and moral fitness which would debar them from practising.

In this the Salt Lake Medical Society is altogether right; and it is hard to understand how any intelligent body of legislators could be led astray from such sound principles, and how it could overlook the fact to which the Society calls attention, that it is entirely unjust to impose a special tax upon a class of men who do so much charitable work, and who are so serviceable to the public.

It is unfortunate for physicians that nowadays the practice of medicine is often regarded as a business, instead of a vocation, and that the ancient respect for our profession has largely disappeared. This is due in part to the freedom with which medical men have communicated information peculiar to their calling to the public, and in part, we believe, to the commercial spirit which is sometimes displayed in doing so. The action of the physicians of Salt Lake City attracts attention to this feature of the

present position of medical men, and prompts the thought that our profession would be in less danger of hostile criticism and unfair treatment if it were wholly free from conduct which detracts from the standing it once had, and brings it into the category of business-men. Let us all think about this, and see what we can do to regain what we have lost. While we join our protest to that of our brethren in Utah against any attempt to impose unjust restrictions upon those who are engaged in the work of healing, let us also labor to maintain a standard of character and educational fitness for our work which shall merit and secure the confidence and respect of our fellow-men.

SEWAGE DISPOSAL.

The problem of the proper disposal of sewage is one of the most important which confronts sanitarians, and every intelligent attempt at its solution deserves careful study. For this reason we call attention to the system of works recently completed in the township of East Orange, N. J., which is practically a suburb of New York City.

The plans for this system were designed about two years ago by Mr. Carroll Ph. Bassett and Mr. Rudolph Hering. The whole includes a series of pipes to receive the sewage and convey it to the works, and the works themselves where the solid matters are separated from the liquid by a combination of precipitation and filtration. The manner in which this is done is described, with illustrations, in the *Scientific American*, Nov. 17, 1888.

The process consists in adding to the whole mass of sewage successive quantities of milk of lime and sulphate of aluminium. These two substances react so as to form sulphate of lime and alumina, and in falling they carry down the solid matter which was held in suspension in the liquid sewage. The whole of the sewage is conveyed into a main and two tanks of peculiar construction, in which the work of precipitation is carried out so that it results in separating a pultaceous mass and a clear liquid. The former is pumped into vacuum pans and forced by pneumatic pressure into filter presses, where clear water passes out and hard cakes of solid residue remain behind. The filtrate, as well as the supernatant clear liquid which passes off from the precipitating tanks, is carried by pipes to a field where it is applied to improve the soil; while the solid cakes are expected to have a high commercial value for fertilizing purposes.

The coming winter will test the capacities of this system, which is so admirable in theory, and by the end of a year we may expect to have its results demonstrated in a way which cannot but prove instructive to all who are interested in this important phase of town sanitation.

There can be no doubt, we think, that some such system for the disposal of sewage is the only rational one; for those which consist in merely carrying off the refuse of towns and cities and emptying it into a flowing stream are mere expedients, and are open to many theoretical and practical objections. It will be of especial value if the experiment at East Orange should prove remunerative, by increasing the value of the products of the farm connected with the works, and from the sale of the fertilizer made in them; for this would simplify very materially the problem of applying the same system to other towns and cities That this may be the case must be hoped by all sanitarians, who for their own sakes will wish the greatest success to the enterprise which we have just described.

—A plumber in this city who had neglected to obey the law which requires him to submit plans of plumbing work to the Board of Health for approval, and had also neglected to report what he had done that it might be inspected, was fined fifty dollars. The Court also gave the wholesome admonition that, in future, offenses of this kind would be more severely dealt with.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

A SYSTEM OF GYNECOLOGY BY AMERICAN AUTHORS. Edited by Mathew D. Mann, A.M., M.D., Professor of Obstetrics and Gynecology in the Medical Department of the University of Buffalo, N. Y. 8vo, pp. 1180. Illustrated with 4 colored plates and 361 engravings on wood. Philadelphia: Lea Bros. & Co., 1888.

This volume, which completes the work on gynecology, is made up of the following papers: The Diseases of the Vagina, by Charles Carroll Lee; The Hystero-Neuroses, by George J. Engelmann; Extra-Uterine Gestation, by T. Gaillard Thomas; Tumors of the Breast, by Samuel W. Gross; Diseases of the Breast Other than Tumors, by Roswell Park; Fistulæ, by Edward W. Jenks; Diseases of the Bladder and Urethra, by William H. Baker; Non-Malignant Tumors of the Uterus, by R. Stansbury Sutton; The Malignant Diseases of the Uterus, by W. T. Lusk; Lacerations of the Cervix Uteri, by Bache McEvers Emmet; Chronic Inversion of the Uterus, by Samuel C. Busey; Injuries and Lacerations of the Perineum and Pelvic Floor, by Howard A. Kelly; The Treatment of Ovarian and Extra-Ovarian Tumors, by William Goodell; Diseases of the Ovaries, by Robert Battey and Henry C. Coe; Diseases of the Fallopian Tubes, by Henry C. Coe and W. Gill Wylie; The Pathology of Ovarian Tumors, by Stephen Y. Howell; The Clinical History and Diagnosis of Pelvic Tumors Other than Uterine and Tubal, by Matthew D. Mann; and Displacements of the Uterus, by George T. Harrison.

A glance at these subjects shows several novel features. Chapters upon the hystero-neuroses, diseases and tumors of the breast, and diseases of the bladder and urethra are well worthy of a place in a modern treatise on gynecology. This volume deals with those subjects which recently have agitated the profession. We will note the treatment of some of them:

Owing to the extensive experience of its author, the article on Extra-Uterine Pregnancy, by Thomas, is especially welcome. He practically agrees with Mr. Tait as to the primary location of extra-uterine pregnancy in the tube—emphasizing the fact "that prior to the twelfth week of gestation the fœtus is very apt to be found in the Fallopian tube"—yet he retains the accepted classification. The author's treatment is conservative. After rupture of the sac, extirpation by laparotomy is not advised in all cases. "During the profound shock which very generally attends such rupture, operation is, of course, impossible." Expectancy is advised, and we are to wait for further evidences of hemorrhage, peritonitis, or septicæmia. In this particular we believe the author is not in accord with the current belief. Why should hemorrhage from a ruptured ectopic pregnancy be an exception to the recognized surgical rule, that hemorrhage must be arrested (except, of course, in those extreme cases in which any effort would simply precipitate the inevitably fatal end)? Should the diagnosis be pretty certain (before the period of viability), and rupture, as indicated by symptoms and signs, imminent, and skillful surgical and nursing aid available, laparotomy and exsection of the sac is advised—or, if exsection is impossible, stitching of the sac in the abdominal incision, with drainage. Should these conditions not be present, fœticide is indicated, by Faradism or galvanism, and extirpation only attempted should subsequent events demand it. The treatment after fœtal viability is also considered.

Sutton gives a good exposition of the subject of Non-Malignant Tumors of the Uterus. We cannot consider the section on treatment, however, as complete. The statistics of the results of operative methods are only brought up to '82–'84, and no mention is made of Thomas Keith's changed views as to the justifiability of hysterectomy. No opinion is expressed as to the value of electrolysis in the treatment of fibroids; we are simply referred to the article by Rockwell in Vol. I. The author concludes that fibro-cystic tumors should be removed, but not necessarily the solid tumors; that removal of the uterine appendages for fibroid tumor is unjustifiable when the tumor can be removed per vaginam; that removal of the appendages is especially indicated in small non-cystic fibroids; that probably 29 out of 30 cases should not be operated upon, as the symptoms do not justify operation. These views are sound, but we believe that the indications for electrolysis should have been defined. Lusk gives an admirable presentation of the subject of the Malignant Diseases of the Uterus, together with the methods of treatment. He says that whether or not a cure can best be accomplished by hysterectomy, or if, in selected cases, partial ablation furnishes a safer and equally satisfactory procedure, is still *sub judice*. The various methods of treatment are well presented. The articles on Neoplasms of the Tubes, by Coe, and on Salpingitis, by Wylie, are welcome additions to the literature. Wylie accepts the results of "Bernutz's remarkable researches on the nature and pathology of pelvic inflammations. He clearly described the disease clinically, and he showed, pathologically, that it was a disease of the tubes and ovaries, accompanied by peritonitis, and that cellulitis had no influence in causing the symptoms, and that it rarely existed except as a phlegmon in puerperal cases. This is the accepted doctrine of to-day—in the past two or three years made plain by hundreds of operations for the radical cure of that large class of cases until recently regarded and treated as pelvic cellulitis."

The student will be confused by conflicting statements made by the various authors—for example, as to the nature, relative frequency, and importance of cellulitis and peritonitis. Also, there is more or less overlapping—thus Emmet's operation for procidentia is described and figured twice, and his operation for narrowing the vaginal outlet is figured twice and described three times; twice the description is copied from his work, which, as is well known, was never intelligible to anybody, and fortunately, the third time, it is described by Kelly in such a way as to be understood.

The two volumes form a most excellent treatise on gynecology, and reflect credit alike on the editor, the authors, and the profession in America. From the standpoint of the therapeutist, we believe it has no superior.

—Surgeon William J. Simon, of the United States Steamer Boston, died of yellow fever on board that vessel at New York, Nov. 27. The other yellow fever patients on the vessel are said to be steadily improving.

CORRESPONDENCE.

The Congress and the Journal of the Association.

TO THE EDITOR.

Sir: In a recent issue of your valuable journal, you called attention to and made some just comments upon a letter which was published in the *Journal of the American Medical Association*, issue of Sept. 22, 1888.

The letter, from which I make the following extract, was *unsigned*, simply headed "From a London Correspondent." Whether written in this country or in London, its ear-marks justify the belief that the London correspondent is no other than a certain American who covers up his identity whilst he makes a stab in the dark. He writes:

"The meeting this month in Washington of the Congress of American Physicians and Surgeons has made little or no impression upon the mass of medical men throughout Europe. Now and then I have heard reference made to the meeting in a kindly manner in this and other medical centres. A very large number of eminent members of the profession in all parts of Europe have been invited, and were urged to attend, but few, very few, will be at the meeting, even though I am told that suggestions have been made to many that possibly American degrees may be conferred upon many who will honor them by their presence.

"Unfortunately for the present managers of the Congress, the part they have taken during the past year against their own countrymen has now become more apparent here, and the reaction has been anything but favorable to them and their meeting. The suggestion, or even the promise, of degrees to be given out, which is whispered around here, may induce a few to attend the meeting, but the very many invited will stay at home"!

Intimately acquainted as I am with the whole scheme of the Congress from its inception to the present moment, and having done by far the largest amount of its foreign correspondence, I am fully and entirely prepared, and that too without fear of contradiction, to say the charge made against "the present managers of the Congress," of suggesting or promising that American degrees would be conferred upon anyone who would honor them with his presence, is without foundation and absolutely *false!* No such idea ever entered the brain of any one of us, and it is supremely ridiculous for anyone to suggest the bare possibility that such distinguished gentlemen as we did invite to be present could be caught by any such bait as a college degree! To stamp the charge as untrue, it is well understood that the Congress itself has no power to confer degrees; and since it was not managed in the interest of any institution having such powers, it was not within the ability of its managers to make any such offer. The letter in question is simply a gratuitous insult to the gentlemen engaged in organizing an association purely scientific in its purposes and without opposition to any existing organization.

As the letter was without signature, thus indicating it to be from an irresponsible party, it would never have received any notice, had not the following "extract" from a foreign periodical been sent me. This shows the *real impression* which the Congress has made upon distinguished gentlemen abroad:

"It is the opinion of those well able to judge that the meeting of this Congress has been a great success in every way. The papers and discussions have been of a very high order, and the visitors are unanimous in considering that there are men in the medical profession of America of the highest culture, ability, and scientific spirit, all of whom are doing work of great value and importance; and it is also markedly evident that there is every desire and determination on their part to raise the character of medical education in their country. In fact, members of the profession in all countries, who wish to keep themselves thoroughly acquainted with all recent and important medical and scientific improvements and suggestions, must carefully study what is being done in America, otherwise their knowledge will not be complete; and I venture to predict that the professional centres and their institutes in this country will in the future be largely visited by those who desire to *perfect* their knowledge of science and medicine."

The letter enclosing this clipping closed as follows:

. . . "I enclose this cutting from an article upon the Congress printed in our principal Scotch paper, 'The Scotsman.' It expresses my own opinion on its success. With kindest regards I remain, very truly,

Thomas Annandale."

Is it reasonable to suppose that such

distinguished gentlemen as Mr. Thomas Annandale, of the University of Edinburgh, Sir William MacCormac, of London, Prof. Fred. Von Esmarch, of Kiel, together with others equally distinguished, who were present at the Congress, were "the few who were induced to attend the meeting with the expectation of receiving American degrees"?

Yours truly,
CLAUDIUS H. MASTIN.

Mobile, Alabama,
Nov. 22, 1888.

Physicians and Druggists.

TO THE EDITOR.

Sir: You will remember that when we last met I suggested to you the discussion of the relations between the Physician and Druggist, and that I asked you what was to become of the practising physician in towns ranging from a very few hundred inhabitants (but thinking itself large enough to support one or two drug-stores) up to the larger towns and medium-sized cities, wherein apothecaries do much abound.

I believe it is not considered quite the style now for a physician to carry his own medicines. The druggist has his eye upon all such, and if he should be a man of much importance either in the trade or socially, and whenever opportunity offers, the poor doctor gets a black eye, and a reputation slightly depressed in every encounter with the learned counter-prescriber.

What does the Physician owe the Druggist? It is admitted that the latter shall keep a supply of the remedies needed in the community—physicians in the towns and villages can scarcely be expected to keep everything needed. The druggist is thus far and in proper bounds a necessity in the community. It is generally expected that the Physician pays at least 25 per cent. for such articles as he wants. This is enough. What obligation is the practitioner under to prescribe all the time when he sees the Druggist's counter and shelves loaded with all the proprietary articles ever heard of, with their all-healing virtues duly inscribed upon the wrappers? When he learns that the druggist soon acquires the name of Doctor from the facility with which he recommends and prepares medicines for his customers, is the sense of indebtedness heightened?

I may be called an old fogy, but I believe the physician, be he located in city, town, or country, should carry and dispense the most of his medicines. Why? I answer:

1. The man who is constantly handling his own drugs learns more about them. I have seen doctors so ignorant of the appearance, taste and smell of many useful drugs that they could not have told whether they had what they wanted or not. This should not be.

2 The expense. If all our patients were rich and generous, this argument would be needless. But there are thousands unable, when sick, to pay the Doctor 1, 2 or 3 dollars for an examination and a prescription to the favorite Druggist, which, when duly prepared, will cost a dollar or two more (especially if there has been a contract between apothecary and Doctor to divide). I say they can't pay both. If the Doctor is not soulless (and I pity a soulless Doctor) he loses: the money goes to pay for the medicines.

3. Old practitioners able to do the best work and turn undesirable calls away can get along; but how can the young physician, who has expended most of his earthly goods to get his Degree of M.D., make headway until he can get established, with the old Doctor and the Druggist both against him. The old Doctor is loyal to the Druggist; has grown fat and indolent. The Druggist cannot desist from whispering across the counter, whether asked or not (often his opinion is solicited before the Doctor is sent for), that it would never do to drop old Doctor Bolus. (I reverence the old as much as others.) What is the young Physician to do? What wrong is he doing if he examines a patient and gives him or her such medication as may be required and collects one dollar or more or less, as the case may be, for advice and medicine? If the patient has to pay the young professional man as large a fee as the older and well established one charges, why, often the young man will starve or go to some manual labor.

Now, Mr. Editor, tell me why it is wrong to do this. I need not tell you that the success of Homœopathy is due to this one fact, that the Doctor carries his medicines. Manufacturing chemists in your city and elsewhere are making such preparations that the Physician can carry his own medicines conveniently and save many an honest penny; and I believe it would be to the advantage of many a doctor, and often to the patient's advantage also, if he were to avail himself of these preparations, and dispense his own drugs. Yours truly,

OLD FOGY.

The Prevention of Conception.

To the Editor.

Sir: In initiating the discussion on the Prevention of Conception, I was careful to state my position distinctly and in plain language. I denounced criminal abortion, and noted my objection to craniotomy during parturition. I have never in the past interfered with conception to save life (as in irrepressible vomiting of pregnancy) nor induced premature labor at any period to facilitate delivery, and if such are needed hereafter another physician must take the case.

In my paper throughout, the question was considered in its connection with the married state alone. The regulation of conception under "proper conditions" was my theme, and I therefore object to Dr. Pierce's assuming, as he does in the issue of November 17, that I countenance immorality in any degree; and those who criticize aside from my standpoint have no right to quote me at all. I am opposed to adultery and prostitution, and although I look with contempt on the bigotry apparently inseparably connected with the discussion of medical problems by so-called religious persons, in this one I am thoroughly orthodox. The eminent physician referred to by "X. Y. Z." in the Reporter of the 10th inst. must hold peculiar views concerning the etiology of nervous prostration when he advises withdrawal; for all neurologists know that this sexual fraud is eminently productive of both local and constitutional disorder, severe in type, *but invariably in the woman!* As to the man, the loss of semen in excess is the factor causing debility or reflex trouble, and not the manner of terminating copulation or of producing emission. The intercourse should always be normally complete, and the use of all mechanical shields, sheaths, etc., by either sex, should be prohibited. It is probable that in most females a longer or shorter intermenstrual period exists during which fruition succeeding sexual congress is not likely to occur, and by observing this and suggesting subsequent ablution the physician will, in the case of those entitled to advice, do all that is required of him. It is difficult to particularize even in a medical journal, without allowing matters to get beyond professional bounds, hence I do not care to say more.

Yours truly,

W. R. D. Blackwood, M.D.

246 North Twentieth Street,
Philadelphia.

Notes and Comments.

A Thirty Days' Fast in Edinburgh.

Alexander Jacques, a Frenchman, has lately begun a thirty days' fast at the Douglas Hotel, Edinburgh, his object being to demonstrate the utility of a certain herb, which he asserts has unusual sustaining and nourishing properties. He has been offered $3000 for his secret, but declines to reveal it under $100,000. The plant, which he says is quite a common one, supplies him with a powder which he calls "Sauveur," and this powder, he holds, will sustain the body in health and comparative vigor without any nourishment being taken, for a time not yet decided. His experiment is exciting considerable interest, and a large number of medical men have visited him at the Douglas Hotel. M. Jacques is, of course, being closely watched, the vigilance committee consisting of medical students, who take the deepest interest in the demonstration. Except for a walk in the early morning, M. Jacques never leaves the hotel. An occasional pinch of his powder, some mineral water, and cigarettes are all he has indulged in since the experiment began, now more than a week ago. He is quite cheerful, and seems confident that he will be able to complete his experiment.—*Medical Press and Circular*, Nov. 7, 1888.

Antipyrine in Polyuria.

At the meeting of the Kansas City Medical Society, October 4, 1888, Dr. Hereford made a verbal report of his own case, and the accidental discovery of the effect of antipyrine in polyuria. He had been affected for some time with polyuria, or diabetes insipidus, and had been unable to find anything which would control the excessive secretion of urine until last August, when, suffering much pain from a carbuncle, he took ten grains of antipyrine for its analgesic effect. It not only quieted the pain, but checked the polyuria. That this was not an accidental arrest of secretion on the part of the kidneys has been conclusively proved by the fact that, since the first of August, he has taken six grains every four hours, and the polyuria is completely under control. No bad effects have been noted under this continuous administration during two months. It probably causes this effect by reducing the irritation in the cerebral center that presides over the secretion of urine.—*Kansas City Medical Index*, October, 1888.

Labor at Full Time; No Rupture of the Hymen.

Hugh Taylor reports the following case in the *British Medical Journal*, November 3, 1888: "Some time ago I was sent for in a great hurry, to a woman in her confinement. She had been in labor for a considerable time, and the midwife told me that there was something which prevented the head of the infant from passing out of the vagina. I examined her carefully, and found a large semilunar-shaped, tough membrane, stretching quite across the lower two-thirds of the vaginal outlet, against which the head was being very strongly pushed by strong uterine action. With some considerable difficulty I was enabled to slip the membrane clear of the child's head, and the labor was then soon completed. The case seems to me of great interest in a medico-legal point of view, as showing that it is quite possible for a child to be born without a rupture of the hymen taking place, and that, therefore, non-rupture of this membrane is not a trustworthy sign of penetration (not) having taken place in cases of rape, etc."

Traumatic Peritonitis; Recovery.

In the *Canadian Practitioner*, November, 1888, Dr. J. J. Cassidy reports a case of severe bicycle accident, followed by peritonitis, hæmaturia, and recovery. The patient was a young man, 25 years old, who fell from his bicycle in such a way that the umbilical and left lumbar regions of the body came in contact with the road. He was severely shocked, so that he was unable to speak. He was, however, able to walk a mile to his lodgings. Peritonitis with hæmaturia developed and persisted for some time, but recovery finally occurred.

North Texas Medical Association.

The North Texas Medical Association will meet in Sherman, Texas, Tuesday, Wednesday and Thursday, December 11, 12 and 13, 1888. In addition to the papers already on the programme to be read in the sections, many valuable volunteer papers have been promised. It is characteristic of this Association that but few minutes are required for the transaction of its general business, the remainder of the time being devoted to scientific section work.

J. T. Wilson, M.D., is President, and George R. Clayton, M.D., Secretary, of the Association.

Dental Department of Meharry Medical College.

The corner-stone of the building to be used for the Dental Department of Meharry Medical College was laid at Nashville, Tenn., Oct. 23, 1888 The Meharry Medical College, which is now attached to the Central University of Tennessee, is intended to give the colored people of the South a more thorough knowledge of the medical and dental sciences. It is the intention of the Faculty to add also a Pharmaceutical Department, the need of which has been frequently manifested by calls upon the institution for educated colored pharmacists. With the exception of the Howard School in Washington, which is for white and colored, there is no other medical school for colored people in the United States.

Prize for Medical Microscopists.

In behalf of "The American Association for the Study and Cure of Inebriety," the sum of One Hundred Dollars is offered by Dr. L. D. Mason, Vice-President of the Society, for the best original essay on "*The Pathological Lesions of Chronic Alcoholism Capable of Microscopic Demonstration.*" The essay must be accompanied by microscopic slides to demonstrate the conditions discussed. Accurate drawings or microphotographs of the slides are desired. Conclusions resulting from experiments on animals will be admissible. The essay, microscopic slides, drawings or microphotographs are to be marked with a private motto or legend and sent to the Chairman of the Committee on or before October 1, 1890.

The essay must attempt to demonstrate: *First*, Are there pathological lesions due to chronic alcoholism? *Secondly*, Are these lesions peculiar to chronic alcoholism?

The microscopic specimens must be accompanied by an authentic history of the case; and complications, such as syphilis, should be excluded.

The successful author will be promptly notified of his success, and asked to read and demonstrate his essay personally or by proxy, at a regular or special meeting of the "Medical Microscopical Society" of Brooklyn. The essay will then be published in the ensuing number of *The Journal of Inebriety* (Editor, T. D. Crothers, Hartford, Conn.) as a Prize Essay, and then returned to the author for further publication or such use as he may desire. The following gentlemen have consented to act as a Committee: John E. Weeks, M.D., Richmond Lennox, M.D., W. H. Bates, M.D., Chairman.

NEWS.

—A heavy frost occurred at Jacksonville, Fla., Nov. 25, and has given occasion for great rejoicing among the people.

—It is reported that Dr. Henry D. Nicoll has been appointed to the Woman's Hospital, New York, succeeding Dr. T. Gaillard Thomas, who has resigned.

—An association called "The Physical Education Society of Pennsylvania," has recently been organized in this city. Dr. A. H. P. Leuf was elected President.

—Typhoid fever is reported to be epidemic at the McAllisterville Soldiers' Orphans' School. Thirty cases and one death are said to have occurred so far. There are nearly two hundred boys and girls in the school.

—From January 1, 1885, to Oct. 9, 1888, the Medical Examining Board of Virginia has examined 240 applicants for license to practise in Virginia; of this number 54 were rejected on first application, and 10 on the second application, while 5 examinations are incomplete by withdrawal of the applicants or otherwise.

—For the week ending Nov. 13, there were 139 cases of scarlet fever in New York and 28 deaths; and during the same period, 136 cases of measles and 11 deaths. During the week following (ending Nov. 20), there were 130 cases of scarlet fever and 2 deaths; while the number of cases of measles had increased to 221, but no deaths were reported.

—In the *Weekly Medical Review*, Nov. 17, 1888, Dr. Ap. Morgan Vance communicates the notes of a case of a mulatto girl, three and a half years old, who was born with a tail. There was no bone in it or prehensile power; it was exactly like a small pig's tail. At birth it measured one inch and a-half, and when removed it was four inches long.

—The *Lancet* says that Sir Morell Mackenzie has resigned his membership in the College of Physicians. This action seems to have been taken because at a Council Meeting of the British Medical Society a resolution was passed deprecating the publication of the details of the late Emperor Frederick's illness as a violation of professional confidence. The Council accepted the regrets of the editor of the *Journal* concerning the publication of them.

HUMOR.

A LARGE IRON SPRING has been discovered in the northern part of the State; it is supposed to have escaped from a Waterbury watch.—*Life.*

IN HIGH CIRCLES.—First Tramp—"I say, have you taken a bath?" Second Tramp (anxiously) — "No! Is there one missing?"—*Harvard Lampoon.*

"DEAR MR. EDITOR: Please read the enclosed poem carefully and return it to me with your candid criticism as soon as possible, as I have other irons in the fire." "Dear Mr. Smith: Remove the irons and insert the poem."—*Journalist.*

TRAMP (coughing)—"No, mum, my health ain't none of the best. I've had this cough two years." Woman—"Why don't you do something for it?" Tramp—"Well, mum, my family doctor died yistiddy, an' I hain't seen a physician to-day what I'd like to trust my health with."—*Time.*

A BRILLIANT SUCCESS.—"Just try to frighten me, will you?" said B—— to M——. "What for?" "I have got the hiccough, and if you frighten me it will make it go away at once." "Very well, then; here goes" (shouting at the top of his voice): "Lend me five hundred francs!" "Ah, thanks! it is gone!"—*Figaro.*

A PECULIAR CASE OF FRACTURE.—He had been in the habit of playing truant from school, and he had been moderately lucky in getting out of the scrape. But he was caught one day and brought before the teacher. "You're late. Where have you been?" "I've been sick." "You don't look sick." "Well, I'm better, but I've been sick, all the same." "You go right home and get a note from your mother or I'll punish you severely." He went off and was gone about ten minutes. It was pretty quick work, and when he handed the note to the teacher she thought that the handwriting did not look like his mother's. She kept her eyes on him as she opened the note, but he was as bland and as innocent as the best boy in the world. The note read: "Miss ——: Please excues John this mornin fur bein late, cos he broke his leg. MRS. ——."—*San Francisco Chronicle.*

DIED.

At the residence of her husband, Darlington, Maryland, on November 18, 1888, of typhoid fever, ADDIE FORWOOD, wife of Dr. W. Stump Forwood, aged 53 years.

THE

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Clinical Lecture.

BASAL MENINGITIS.

BY LANDON CARTER GRAY, M.D.,

PROFESSOR OF NERVOUS AND MENTAL DISEASES IN THE NEW YORK POLYCLINIC.

Gentlemen: I shall read to you the history of a very interesting case of intracranial lesion:

Miss ——, forty-three years old, has all her life been troubled with weak eyes, her family being all near-sighted; but about five or six years ago she began to suffer with severe headache, and soon afterward observed that her eyes were failing more than had been the case with any other member of the family. She has never at any time during her life been much of a reader, because of the weakness of her eyes Last September the eyes became very much worse, so that she sought the advice of a well-known oculist. At that time she had temporal hemianopsia of the right eye in a vertical meridian. In the left eye a zone of diminished vision went five to ten degrees farther to the right side. Her sight was in the left = 1/8. Since that time the patient has become rapidly worse, so that the right eye, she tells me, is completely blind, whilst the left is almost so. The headaches have become much more severe. When she first came to me, February 4, 1887, she could distinguish the gas flame, and could tell that I had lifted up my arm between her and the light; but she could distinguish nothing more definitely. There was slight external strabismus of the right eye. The left eye was completely blind. The senses of smell, taste, and hearing were distinctly impaired on the left side, whilst the same senses were perfectly normal upon the right. The hand-grasp on the right was distinctly weaker than on the left. There was a slight difference in strength between the right and left legs, the right being the weaker. She told me that she was much weaker on the right side after a severe headache, that she would then stagger to the right, and that this weakness would persist for several days after an attack of headache. She also says that at the time of the special weakness of this right side she has dull aching throughout it. The headaches come with great suddenness, without the slightest apparent cause, and are accompanied with explosive vomiting; she may, perhaps, have one after a meal that has been eaten with perfect comfort. These headaches come every week or every few days, lasting several hours. There was absolutely no impairment of the senses of touch, temperature, pain, or of the muscular sense on the right side. The tendon reflexes were normal. She walked perfectly well, had no impairment of memory or of intellect, was a very intelligent woman, and in excellent general condition.

Upon this history, obtained over a year ago, I made the diagnosis of a lesion at the base of the brain. It was not a difficult matter to make a diagnosis of an intracranial lesion: the peculiar headache of the so-called cerebral type—*i. e.*, with explosive, seemingly causeless vomiting—and the hemianopsia; the impairment of the three special senses of taste, smell, and hearing, and the motor weakness of the right side after the headaches, constituted

ample data upon which to make a perfectly certain diagnosis of an intra-cranial lesion. It seems almost idle to say that a headache from extra-cranial causes would very seldom have this cerebral type; and, even if it did, it would not be accompanied by all the sensory and motor impairments that were present in this case. Occasionally, it is true, we meet with sudden vomiting in headaches due to nephritis, or in cases in which the urine may be found to be loaded heavily with uric acid crystals; but these cases have, of course, no motor or sensory paralyses. Nor was the question of localization of the lesion a difficult one. The cross-paralysis—*i. e.*, the paralysis of hearing, taste, and smell on the left side, and the motor paresis upon the right side—showed that the lesion must be at the base of the brain, implicating the nerves of smell, hearing, and taste on the left side and the crura cerebri on the same side. As you know, of course, the three nerves of smell, hearing, and taste would be distributed to their respective sense organs upon the same side, whilst the fibres in the crura cerebri would pass over to the opposite side when they had reached the region of decussation in the cord.

But there was, you will remember, external strabismus of the right eye, which means that there was paralysis of certain fibres of the right third nerve, or motor oculi; so that the lesion must have extended to the right side of the base of the brain, although it was mainly located upon the left. The nature of the lesion was not so easily determined. We should have to select, as the most probable causes, either intra-cranial syphilis, a tumor, or meningitis either of idiopathic, traumatic, or middle or internal ear origin. Intra-cranial syphilis was promptly excluded for several combined reasons: 1. The patient was an old maid of irreproachable life and habits; 2. Even admitting that life and habits count for nothing, or that the patient might have been inoculated through some buccal lesion, or in some other accidental way, the symptoms did not indicate any intra-cranial specific infection. As I have had occasion to demonstrate, intra-cranial syphilis has generally very well-marked symptoms of its own, consisting of a headache which has some quasi periodicity, and is often nocturnal; an obstinate insomnia going hand in hand with the headache; a distinct mental irritability accompanying the headache and the insomnia; and, finally, a remarkable cessation of the headache when a paralysis makes its appearance. As none of these symptoms were present in our patient, intra-cranial syphilis could be very certainly excluded.

The diagnosis, therefore, lay between meningitis of idiopathic, traumatic, or of middle or internal ear origin, or a tumor. There was absolutely no history of any trauma, and the most careful examination of the ear disclosed no other disease than that of the nervous apparatus on the left side, which has been described; nor was there any history of any ear trouble in the past. The diagnosis, therefore, still further narrowed itself down to a meningitis of idiopathic origin or a tumor. The neuro-retinitis was, of course, of no diagnostic use, because it might have been produced by either intra-cranial syphilis, tumor, or meningitis; and although there are differences in the early stages in the neuro-retinitis of these three different forms of intra-cranial trouble, no differences were apparent at the stage when our patient first came under observation. The space over which the lesion extends is a matter of considerable importance in the differential diagnosis. In this case, for instance, as you can see by any anatomical plate of the base of the brain, the lesion extends from the olfactory nerves backward to the crura cerebri, and still further back to the auditory and glosso-pharyngeal nerves on the left, and then it also affects the third nerve upon the right side. A meningitis, especially of the pia mater, would be much more likely than a tumor to cover such an extended area in so fragmentary a manner. A neoplasm, too, would have been much more likely to have caused more destruction and to have given rise to a large amount of mental hebetude if it had existed for so long a time and had spread over so wide an area.

A diagnosis was made of a meningitis, probably of the pia mater—a so-called lepto-meningitis—of the base of the brain. The prognosis was regarded as very serious; indeed, the patient's friends were told that, in all probability, death was merely a question of time. The patient was treated simply by means of the iodide of potash, given in increasing doses until forty grains were given three times a day; at times the inunction of mercurial ointment was ordered.

I lost sight of the patient until to-day (April 15), which is about one year after her first visit to me, and six or seven years after the beginning of her cerebral symptoms.

Now let us see what difference in symptoms there is.

She cannot see this gas flame, but she can see me between her and the window. Her sight is, therefore, slightly worse than it was a year ago. Let us test her sense of smell with the oil of thyme. As you know, a distinction must be made between the pungent odors, such as aromatic spirits of ammonia, which are perceived by the sensory filaments of the trigeminus in the nostril, and the pure odors, of which perception is gained through the olfactory nerve. Tested with this oil of thyme, therefore, we find that the sense of smell is now perfectly equal on the two sides, so that the impairment of smell on the left side has entirely disappeared.

We usually test the sense of taste by means of bitters, acids, and salts, using quinine as the type of the bitters, vinegar as the type of the acids, and common table-salt as the type of the salts. Then, again, it must be remembered that the nerve of taste in the anterior portion of the tongue is the chorda tympani, whilst in the posterior portion of the tongue it is the glosso-pharyngeal; so that these anterior and posterior regions must each be examined. The testing of taste is a very delicate matter, and often unsatisfactory with these tests. The best way is to have a little rod or match, with a small piece of absorbent cotton on the end. Dipping this into the test fluids, a drop should be placed carefully first on one side of the median line, and then upon the other, of the part of the tongue to be examined. Before doing this, however, the patient must be instructed to protrude the tongue, and to indicate when he tastes anything, by raising the hand; for, if he attempts to tell his sensation by speech, in goes the tongue, and the testing fluid is smeared all over the buccal cavity and the other portions of the tongue. But the best method of examination of the sense of taste is by the galvanic current. Only a few cells of any ordinary battery are needed, and the ends of the wires should be armed with long metal points. The strength of the current should first be tested upon your own tongue, so as to obtain only enough to give a savor and not enough to burn the tongue; these two metal points should be placed half an inch apart upon the portion of the tongue to be tested, and the patient instructed as before to indicate the presence of the sensation by uplifting the hand. Tested by all of these methods, we find that the sense of taste in our patient is still slightly impaired in the left anterior portion of the tongue, but that it is perfect in the left posterior portion; whereas it was entirely lost both anteriorly and posteriorly a year ago.

The strength of the hands is usually tested by means of the so-called dynamometer, with which all are familiar. But the neurologist comes to have a *manus erudita*, akin to the *tactus eruditus* of the gyneco'ogist. Anyone can attain to considerable skill in the appreciation of strength in a hand-grasp when the matter has been studied through many years and in a long series of patients. I think I can tell the difference between the strength of hands as well with my hand as with a dynamometer. Tested by the hand and by the dynamometer, our patient is found to be equally strong on the two sides, so that the weakness of a year ago has disappeared.

Testing the hearing by the familiar methods of the watch, the voice, and the tuning-fork, it is found to be unimpaired on the left side; whereas a year ago she could not hear the ticking of a watch beyond eight inches, and could not distinguish low articulate sounds unless the speaker spoke directly into the ear.

But the crowning triumph of the treatment is shown in the condition of the headaches, for she tells me that they now never last more than five minutes; so that I almost think they are now no more than neuralgic twinges, inasmuch as they are never accompanied by either emesis or nausea.

This is an extremely interesting illustration of the chronicity of certain intracranial lesions. Whether the improvement is due to the inherent tendency to recovery or to the curative effects of treatment, who can tell? These cases do certainly seem to improve at times under medicines and special forms of treatment, and occasionally with such promptitude as to render it positive that the medication is to be credited with it. These curative agents are the iodides, mercury (preferably by inunction), cerebral galvanization, and occasional doses of quinine and bromide of potash. The iodides should be given in doses as high as twenty or thirty grains three times daily; the mercury should be rubbed into the armpits or into the soft flexor surfaces of the limbs. In the galvanization of the cerebrum large electrodes, well moistened with hot water, should be used, from three to five milliamperes of electricity being employed. Five grains of sulphate of quinine and thirty grains of bromide of potash should be given at bedtime every two or three weeks.

COMMUNICATIONS.

ANTISEPTIC SURGERY IN COUNTRY PRACTICE.[1]

BY J. M. TAYLOR, M.D.,
CORINTH, MISS.,
EX-PRESIDENT MISSISSIPPI STATE MED. ASSOCIATION AND OF MISSISSIPPI STATE BOARD OF HEALTH, ETC.

In medio tutissimus ibis.

One of the characteristic and distinctive features of this Association, I presume, will be the large element of country practitioners of surgery and gynecology who will constitute its membership. Doubtless a very large proportion of the reports that will be read at the annual meetings will represent the practice done in the comparatively small towns and villages and on the plantations and farms in the Southern States. Very few large hospitals or other eleemosynary institutions will be represented in it. Consequently, those subjects and those methods which more peculiarly interest and pertain to that class of practitioners should be selected for especial consideration in our deliberations. Simplicity of details, and economy both in time and in money, are matters of the very greatest importance to them. Many of them ride by day and by night, on horseback, in buggies, and on railroad trains, in all seasons, over the hills and through the swamps, carrying, in a pair of saddle-bags or a little hand-bag, all the medicines, instruments and appliances used by them in the treatment of all diseases and injuries, medical, surgical and obstetrical. They often visit a considerable number of patients on the same day, requiring diverse treatment, some of them many miles apart. In many instances they have to contend single-handed against poverty, ignorance and filth, separately or combined. Under such circumstances they can afford neither time nor money for non-essentials, either in theory or in practice. They soon become self-reliant, and learn to discard everything superfluous or unnecessary. No class of practitioners is less restrained by the formalities and the prescriptions of authority than they. Being more interested in the utilitarian than the speculative theories of the profession, they are sometimes in advance of their more fortunate (?) city brethren on practical questions, even though they should not be *au fait* in the latest sensation.

If half that has been said and written in behalf of antiseptic surgery were true, it is doubtful whether the country practitioner should feel more grateful for it as a great discovery, or more discouraged by the extravagant and impracticable conditions which it imposes. Although these conditions have been greatly simplified of late, and much of its complexity has been abandoned, still all the details now required are practicable only in hospitals and in the homes of the more wealthy classes. Consequently, if country practitioners should encumber themselves with all the paraphernalia required, the environment of their patients in a large proportion of cases would render it useless. Admitting, then, that the doctrine is true as claimed, the strict rules of antiseptic practice can be followed by country practitioners only in a limited number of cases, as the subject is now understood.

I am not vain enough to undertake a thorough critical review of antiseptic surgery. A subject which has occupied so much space in all our medical journals for so many years must be sufficiently familiar to every physician in the country. And having no new facts to present, it would be a waste of time to reiterate that which is already known to everybody, even if I were competent to do so—which is by no means the case. But a few practical reflections on some of its more salient points may be allowable.

Inasmuch as great latitude has been taken in the consideration of antisepticism which includes all that is meant by antiseptic surgery, it may be well to define what is meant by the term as used in this paper. According to some, it is used to include not only all means used to destroy germs *in esse*, and to prevent their generation, but also to prevent infection from any and every other source. Perhaps but little fault can be found philologically with this definition. But practically it is not correct, and I would restrict it to a consideration of the means and methods proposed for the destruction and prevention of micro-organisms of all kinds, on the assumption that they are the specific causes, the actual, and active, and only pathogenetic agents in the several diseases in which they are found. The use of the term, as applied to means to prevent sepsis from any other source, is an afterthought, is not the construction intended by its originators. The term phrenology would imply, from its etymological construction, mental philosophy, or the science of the

[1] Read at the meeting of the Southern Surgical and Gynecological Association, at Birmingham, Ala., Dec., 1888.

mind in its broadest sense; but we all understand by that term, as it is commonly used, what has been vulgarly called "bumpology," or the art of telling the peculiarities of individuals by palpation of the head, or, if you please, cerebral localization. In a single word, then, I would define antisepticism, as applied to antiseptic surgery by modern writers and practitioners, as *Bacteriopathy*.

As all know, it is founded on the germ theory of disease, one of the most beautiful and plausible theories that was ever launched on the sea of medical philosophy. But it is another striking example of the tendency in our profession to seek for a principle before the facts upon which it is founded have been sufficiently investigated and established. Indeed, the medical profession has been dominated from time to time all through its history by theories which have received more or less general endorsement, some of which, when subjected to the crucial tests of time and experience, have been rejected as false *in toto*, while many of them, though containing many false facts, have developed some important scientific truths, and have contributed some real and useful precepts to the practice.

Cullen said: "There are more false facts than false theories in medicine." But when we take a retrospect of its history from the earliest days to the present time, we find much that is false in theory and in fact. Current medical literature has always abounded in chaff, from which it is often difficult, for the time being, to separate the grain. Leaving out the vagaries of homœopathy, allopathy, hydropathy, Thompsonianism, electicism, *et id genus omne*, we need only refer to the doctrines of the various schools from Pythagoras to the present time, and to the transient systems of practice based on them, which have held sway for a short season. They are too numerous and varied even to enumerate, but everybody can readily recall many examples. Medicine has been cursed in all ages by so-called discoveries, and many of the greatest minds in the profession in every age have been wasted in the vain pursuit and defense of some imaginary discovery. Paracelsus, a noted teacher of medicine in the 16th century, discovered the doctrine of Tartar, which he said was the cause of all diseases of accumulation, obstruction, and concretion. Thompson discovered that all diseases originate from cold, and that heat and heating remedies supply a perfect panacea. Hahnemann, the founder of homœopathy, discovered that all the maladies which afflict mankind, epidemic, sporadic, idiopathic, and symptomatic, spring from three original diseases, viz.: syphilis, sycosis, and the itch. His *similia similibus*, dilute potencies, and infinitesimal doses are therapeutical novelties worthy of his pathology. And now comes along the doctrine of the germ theory, which teaches that all diseases originate from specific germs or living organisms. We have the bacterium of suppuration, the bacillus of tuberculosis, the bacillus of syphilis, of hydrophobia, of cholera, of tetanus, the gonococcus of gonorrhœa, etc.

This beautiful theory supplies a desideratum in etiology long felt, and furnishes an easy solution to many problems which have greatly perplexed the profession for many generations. Immediately after its promulgation, the fertile mind of the discoverer, ever on the alert for something new, was set to work to find some means of killing these microbes, which, like the giants that peopled Don Quixote's brain, cause all the miseries and all the woes that afflict mankind. Antiseptic surgery, Minerva-like, sprang into existence in full panoply, and has carried the medical profession by storm, with all its boasted modern advancements. So strongly is it endorsed, that it is almost as much as any ordinary man's professional scalp is worth to express any doubts of its entire correctness. Carbolic acid long stood at the head of the list of germicides. Not only the hands and instruments of the surgeon, but all dressings, were required to be constantly wet with a solution of it, and the very atmosphere of the operating-room must be filled with its fumes. A complicated apparatus was required to generate the spray, which, however, proved to be so unhandy and so inconvenient that it was found to be unnecessary and has been abandoned by many operators. To say the least of it, it is possible that more lives have been lost by it than by the microbes it was intended to kill.

Without attempting to enumerate all or any of the minor agents recommended and used as germicides, I will only mention the latest, bichloride of mercury. This is all the fashion now, having supplanted carbolic acid to a very great extent. It is a most virulent poison, and to be at all safe it must be diluted to homœopathic proportions. Even then, if strong enough to be relied on as a germicide, it is not devoid of danger. Billroth says: "Corrosive sublimate in dilute solution is practically inert as an antiseptic application to wounds, and

renders the patient and surgeon alike liable to mercurial poisoning. Carbolic acid, known to be dangerous in strong solution, is in very weak ones as good for wound irrigation as clean water, but probably no better."

We are not yet freed from the superstition and credulity which have always prevailed in our profession. We are still liable to be captivated and led astray by the plausible deductions and legitimate conclusions drawn from false premises by enthusiastic discoverers; and if we look with contempt and pity on the absurdities of the exploded doctrines of our predecessors, we doubtless shall meet the same fate from our successors. It yet remains to be proved that the discovery of bacteriopathy is any more true or practically useful than homœopathy or hydropathy. False and absurd as these latter may be in theory and in fact, nobody will deny that they have accomplished good results in practice. And if antisepticism in surgery should accomplish nothing more than to demonstrate the great advantages of absolute cleanliness, it will have accomplished incalculable good. It will not be the first instance in which exhaustive studies and experiments have been made in pursuit of a false theory, whereby grand results, not contemplated and not anticipated, have been accomplished. Astrology, diligently studied for many centuries, for the purpose of learning how to foretell and even to control future events, led to the grand and beautiful results of astronomy; and alchemy, which engaged the minds and the life-time studies of the greatest philosophers of the world, whose object was to find out the secret of converting the baser metals into gold and silver, and to discover the elixir of life or the art of preserving human life indefinitely, resulted in the splendid achievements of modern chemistry. I would not, therefore, underrate the labors and investigations of such men as Pasteur, Koch, Klebs, Cohn, Cohnheim, Virchow, Tyndall, and others in Europe and America, engaged in similar studies. I confidently expect important results from their labors, whether the germ theory be established or not. But any system of practice founded on a theory not yet proved to be true is premature, and is destined to be severely pruned, if not entirely discarded, by the inexorable hand of time. Whatever of truth there may be in it, of course, will stand the tests of time; but the errors will be relegated to the limbo of their predecessors.

The frequent presence of bacteria or other micro-organisms in disease-processes, is generally admitted, and seems to be easily demonstrated. But their functions, or their relations to those processes as cause or effect, are not established and do not seem likely to be soon. Opposed to the theory of their agency as etiological factors, we have the hypothetical doctrine of their incidental or accidental presence as natural scavengers for the consumption of effete matter. The extreme minuteness of these bodies, requiring the most powerful microscopes for their investigation, as well as the great liability to optical illusions, makes it so difficult to understand their true relation to their surroundings, and to define their exact agency in disease, that we should be very slow to found upon their presence any theory, or any system of practice, calculated to revolutionize the established methods of many centuries.

Bacteria or micrococci have been found in great quantities on the mucous membranes, in the blood, and in the fecal discharges of healthy persons. They have been found under Lister's antiseptic dressings without suppuration following. It is asserted furthermore, by high authority, that suppuration can be produced without the presence of minute organisms of any kind. The bacillus of tuberculosis, from the discovery of which we were induced to hope so much, has been found under such varying circumstances, that nothing practical seems likely to result from it. The same may be said of all the rest, except perhaps the bacillus of anthrax, which alone seems to have met all the requirements of mycologists, as a specific and demonstrable cause of disease. In the case of all the others the conclusion is merely from analogy. It is claimed that a septic liquid may retain its poisonous qualities after all microbes have been destroyed in it, and it seems to be proved by experiments that septic poisoning can be produced in animals by the products of organic decomposition without the presence of living organisms. It is claimed that bacteria become most numerous in materials of a septic or infectious character, after the period of their toxic intensity has passed by. Wherefore it may be assumed with equal authority, that all the effects usually attributed to disease germs may be caused by the toxic action of the soil in which they have existed, whether it is membrane, urine, blood, virus, artificial culture material, or anything else.

In this connection the pathogenetic agency of ptomaines and leucomaines should be

duly considered. But I do not propose to consume any time with that subject, although it is now engaging, in its investigation, some of the ablest chemists and biologists in the world. If the researches of Gautier, of Brieger and others engaged in its study, should verify their etiological importance, and if the claims of bacteriologists should be established, our profession will be completely revolutionized, and all our present systems of etiology, pathology, and therapeutics will be supplanted. But however much we may boast of our superior attainments and enlightenment, it is not at all probable that we are so far superior to our ancestors as to warrant any such expectations. It is a fact, I believe, that every generation has considered itself much smarter than its predecessors, but yet we find "that history merely repeats itself."

But I have already extended the limits and scope of this paper beyond what was intended when I commenced writing, and I will conclude with a few practical suggestions for the benefit of my country brethren. It is a fact undenied, and probably undeniable, that the mortality from wounds and surgical operations, especially in hospital practice, has been greatly reduced since the introduction of antisepticism. But it is a significant fact, that the very highest degree of success has been achieved by surgeons who do not use the antiseptic methods. And this is not due to accidental or fortuitous circumstances. Surgeons of equal qualifications have operated at the same time, in the same hospitals, one with and the other without all the rules of antisepticism, with equal success. I venture the assertion, that the qualified general or country practitioner who uses no antiseptics *per se*, can boast a degree of success equal to that of the most distinguished specialist with all the antiseptic appliances most rigidly enforced. I will not consume time in an attempt to enumerate the causes of this, or the causes of the great decrease in mortality, not the least of which is the increased importance attached to cleanliness, and to minute details in operations and in treatment. Ever since the Mosaic laws were promulgated, filth as a factor in disease has been more or less appreciated in all civilized countries. But never has this appreciation taken such practical shape as it has done within the last few years. The fact is established and admitted by everybody; but like many other facts in medicine, it is empirical, its *modus operandi* is not as yet understood. Great harm has been done to the profession by the crude philosophy and hasty conclusions of pseudo-scientists, which constitute the great bulk of our literature on this subject. It matters not how distinguished the writers may be, and it matters not how plausible their reasoning may be; if it is not based on original research, and on premises well established, their conclusions are not reliable. They may be familiar with the microscope, and they may be able to focus micro-organisms, and yet not be reliable. Very few men in the world are qualified to give authoritative opinions on this subject, and such men are about the last to promulgate a dogmatic declaration on this or any other subject. No amount of study and speculation on other men's labors can settle any question until all the basic facts have been clearly evolved and established. I would therefore caution my country brethren, and all general practitioners, who are practical, if anything, to beware of hasty and imperfect conclusions. Wait until all doubts and uncertainties have been removed by those who alone can do it. Avoid the growing spirit of reckless experimentation. In the meantime, let us stick to those means and methods which have given success to our fathers, and which have enabled us to achieve results which we can compare with pride and confidence with the best of them. I would not reject anything because it is new, but I would not adopt it merely because it is plausible.

FRACTURES OF THE FOREARM.[1]

BY JOHN BROWNRIGG, M.D.,
COLUMBUS, MISS.

Believing that we have not attained a perfect method of treating the most common fractures of the forearm, I present for your consideration some new appliances which have been used with good results. In these fractures it is best to prevent flexion, extension, pronation and supination of the forearm. It is also necessary to keep the forearm splints parallel to each other transversely and longitudinally. Collis's and Barton's fractures require a different appliance, which will be described separately.

Fractures Above the Lower Third.

The roller bandage has done so much harm in unskillful hands that I have abandoned its use except on the hand. With the

[1] Read at the meeting of the Southern Surgical and Gynecological Association, at Birmingham, Ala., Dec., 1888.

elbow flexed at a right angle, the inside splint should be a little wider than the forearm, and long enough to extend from behind the elbow to the metacarpo-phalangeal articulation. The outside splint should be of the same width, and long enough to extend from behind the elbow to near the styloid process of the ulna, and should be cut out under the thumb. Two pieces, of the same thickness as the splints and one inch wide, should be shouldered into the outside and inside forearm splints so as to present a plane surface with them, and secured to the splints with little nails, so that these pieces will be at right angles with the splints, and opposite the axis of the arm, and long enough to extend up the arm to below the prominence of the deltoid muscle. To these inch-wide pieces are tacked, next to the arm and above the elbow, two bands of tarboard, wide enough together to envelop the arm and meet above the forearm at the elbow as flexed, and extending upward as high as the inch-wide pieces. If higher, they will be pushed down by the prominence of the deltoid muscle, and the splints with them, so that the bones will be bent at the point of fracture. The pieces of tarboard should be soaked in hot water, so as to be molded to fit the arm, and lined with cotton wadding and cloth next the skin.

The forearm splints should be cut an inch longer than necessary, and, after the tarboard bands are tacked on, apply the splints, and mold the tarboard bands to fit the arm, and then cut the lower end of the splints off, the right length.

The forearm splints should be notched on their outer edges, to keep the strips of cloth to be tied around them from slipping. Strips of cotton wadding should then be laid on the side of the splints next the arm so as to fit the arm, in some places thick, in others thin, and a piece of cloth sewed around the cotton wadding and splints, drawn so tight as to cause the cotton wadding and cloth covering to present a slightly convex surface, as used by the late Dr. F. H. Hamilton on his forearm splints. Too much convexity is not desirable, as the bones may be pushed too far apart, particularly if the strips of cloth are tied too tight around them. There should be but little cotton under the hand and at the elbow.

When the bones are from any cause disposed to separate too far, a many-tailed bandage, applied at the point of separation and extending to the hand, will prevent it. Apply a narrow roller bandage to the hand from the wrist to near the end of the fingers, apply the splints, and, if they fit, bind them on with a few strips of cotton cloth, tied around the arm and forearm parts, so as to exercise gentle pressure. These strips can be loosened or tightened by anyone as the arm swells or shrinks. These convex pads serve well to keep the bones apart, but caution is required in their use, as by binding them too tight the bones may be forced too wide apart or pressed out of position.

When the ulna is broken near its middle, the upper fragment is sometimes drawn away from, and the lower toward, the radius, so as to cause a separation of the broken ends. It is at this point that ununited fracture often occurs. To prevent this, a strip of thin board, not quite so wide as the space between the lower edges of the forearm splints when applied, should be padded with cotton and rolled in cotton cloth and placed underneath the strips which bind the splints on, so as to keep the ulna straight. This thin board should be of the same length as the outside splint. The forearm should then be placed in a sling with thin strips of wood sewed in its upper edges.

In 1885 I read a paper before the Mississippi State Medical Association, describing two rectangular splints, which I had used in these fractures, before I had seen Dr. John H. Packard's account of the use of an internal rectangular splint.

Dr. Scott's rectangular splint prevents motion of the elbow, pronation and supination, but does not provide for keeping the bones apart, and the forearm is in a position of forced supination, which is very uncomfortable. Finding the straight rectangular splints disposed to slip down, I adopted those described above. Very moderate pressure is required, and it is difficult to displace them. A many-tailed bandage should be tied around the hand and splint to keep the hand up.

Barton's or Collis's Fracture.

All the fractures at the lower end of the radius, whether transverse or comminuted, or the oblique fracture first described by Dr. Barton, require extension and counter-extension. These cannot be obtained by using the hand as a lever and the lower end of the ulna as a fulcrum, even when its semi-articulation with the carpus is not destroyed. The displaced fragments cannot be forced into position and kept there by coaptation splints, and if this could be accomplished, the amount of pressure required leaves the wrist and hand stiffened. Fractures near a joint almost always leave the joint stiffened

unless early motion is resorted to. This inflammation is almost certain to attack the articulations of the carpus. Internal and external coaptation splints, no matter how shaped, prevent motion, and more or less pressure on the carpus is necessary. It is important to preserve the proper position of the lower end of the ulna in relation to the carpus. The cause of the loss of prominence of the styloid process of the ulna is due to the twisting of the carpus with the fragment of the radius attached inward, and it is also drawn to the radial side of the forearm by the contraction of the muscles attached to the hand. This displacement of the lower end of the ulna is more marked when its semi-articulation with the carpus is destroyed. The contraction of the muscles causing this displacement should be resisted by extension and counter-extension. If one grasps the hand and twists it forcibly inward a good idea can be formed of the manner in which this displacement occurs. If the muscles of the forearm are resisted by extension and counter-extension in the direction of the axis of the radius, there will be a tendency to readjustment of the fragments, and with very little lateral support this can be accomplished. For this purpose I use a splint composed of an iron bar, sufficiently strong to prevent motion of the elbow, and to keep it flexed at a right angle. The bar extends from below the prominence of the deltoid muscle to the elbow, where it is bent so as not to press on the elbow, thence along the radial side of the forearm, which is between pronation and supination, the thumb being upward; to beyond the end of the first phalanges, the hand being flexed, where it is bent downward at a right angle about three inches. Where the bar passes over the thumb, it is bent upward so as not to press on it. In front of the arm a tarboard splint or band is riveted to the bar, wide enough to extend from the top of the bar to near the forearm, and long enough nearly to envelop the arm.

To the forearm part of this bar is secured a similar tarboard splint, by two strips of sheet iron, riveted to the tarboard splint and bent loosely over the iron bar, so that the splint can be made to slide up or down on the bar. This tarboard splint should be as wide as the forearm on its inside, and a little over half as wide on the outside of the forearm, care being taken that it is not wide enough to press on the styloid process of the ulna nor on the ulna. It should be long enough to extend from near the elbow to the lower end of the radius. The hand should be flexed loosely, the ends of the first, second, and third fingers resting easily on the ball of the thumb. A roller bandage about an inch and a half wide should be passed around the wrist three times and the end stitched. A broad band should be stitched to the bandage around the wrist on the back of the hand, and carried around the flexed fingers and stitched to the bandage on the inside of the hand at the wrist, to retain the fingers in a flexed position. The object of this is to preserve the parallel position of the metacarpal bones, and to prevent their being folded inward upon each other by the extension band, described as follows: A belt cut bias to fit the hand near the carpus, and buckled securely, so as not to slip over the hand, is applied. Two rings of brass or other metal are sewed to the lower edge of this belt, one on the outside and the other on the inside of the hand. Extension is obtained by a cord passed first over the bent lower end of the bar, the ends being then passed through the rings and tied over the bent end of the bar. Counter-extension is obtained by the pressure of the tarboard splint against the arm above the elbow.

The tarboard splints should be lined with cotton wadding and cloth next the skin, and secured to the arm and forearm by many-tailed bandages, the ends being tied together. After the cord is tightened sufficiently, the forearm tarboard splint should be slipped on the bar toward the hand until the lower end reaches near the carpus, and can be made to act as a coaptation splint at the point of fracture, but only gentle pressure is required, the contraction of the forearm muscles causing the displacement being resisted by extension and counter-extension.

Sometimes a narrow roller bandage is required to keep the hand from swelling.

Constant slight motion of the carpus is permitted. When the splint is applied, the thumb should be under the iron bar. This can be secured by applying the belt around the hand so that the ring on the back of the hand will be near the thumb, and the one on the palmar side nearer the little finger. This causes the hand to be twisted outward, which is the reverse of the abnormal position resulting from the fracture.

If greater lateral pressure should be required, it can be obtained by two pieces of thin board placed transversely opposite the point of fracture, one inside and the

other outside the forearm, the ends projecting a little so that cords can be tied around them below and above the forearm. These pieces will press as required on the tarboard splint. I have only had to resort to this in a case of ununited fracture of eight weeks' standing.

THE PREVENTION OF CONCEPTION.

BY H. B. RUNNALLS, M.R.C.S., L.S.A. (ENG.),
BEDFORD, PA.

I have read with interest the various papers which have appeared in the REPORTER, upon this subject, and I believe that, if it is discussed upon purely scientific grounds, nothing but good can result from it, both for the public and the profession; but if it is written upon with a view to providing means for preventing conception, from pecuniary or social motives, then, in my opinion, it would be well to allow the matter to drop. Long ago I thought, and I still think, that the law should make it a "criminal act" for members of either sex, suffering from constitutional diseases which might be transmitted to their offspring, to indulge in sexual intercourse; for the effect of such intercourse is usually to reduce the physical standard of a nation, and to produce a population to whom life is a misery. It would be well, perhaps, if the law forbade marriage unless the parties concerned were, first of all, examined by medical experts. That there are cases which come under this notice, in which, after marriage or after the birth of children, means to prevent conception should be adopted, I am prepared to grant; and in these cases, it should only be suggested after the reasons for such had been explained. I would always advise it where puerperal or uræmic convulsions accompanied pregnancy; where vomiting was severe during pregnancy; where any pelvic deformity existed, or any uterine or ovarian growth was present; where excessive hemorrhage accompanied labor; where the perineum or other parts had been lacerated much during labor; where any hernia of the intestines was present; and where any heart, kidney or lung mischief was present—in fact, in all cases in which the medical attendant was of the opinion that evil results would follow conception; but never merely for social or economic reasons.

Wherein lies the difference between prevention of conception and the production of abortion? It does not much matter whether it is the spermatozoid or the fœtus that is destroyed, the fact is the same. For those whose moral sense has reached such a low standard, the charlatan has already provided the "French letter" and other means; but I hope the day will be far distant when our profession recognizes such practice except for physical reasons.

ASEPTIC NEEDLE-FORCEPS.

BY A. ADY, M.D.,
MUSCATINE, IOWA.

The instrument represented by the engraving will hold any kind of needle—round, flat, straight or curved—and hold it firmly. It has both a diagonal and rectangular slot. In these days of antiseptics, all surgical appliances should be as free as possible from any danger of carrying septic material from one case to another; and any instrument

that can not be readily taken apart for the purpose of cleansing is consequently dangerous. This holder was invented with special reference to the avoidance of any such danger. Being practically composed of only four pieces, it can be taken apart instantly by removing the nut, and cleansed and as readily put together again. I find it a very handy instrument, especially in gynecological operations.

Society Reports.

ITALIAN SOCIETY OF INTERNAL MEDICINE.

FIRST CONGRESS, AT ROME, OCT. 20 TO OCT. 24, 1888.

(*Concluded from p.* 688.)

Monday, October 22.

Prof. Cardarelli, of Naples, read a paper on the

Treatment of Heart Disease,

in which he said that the first symptom which indicates some kind of organic disturbance of the heart muscle is the increase of the intra-cardiac pressure; this increase produces a slowing of the cardiac rhythm by a stimulation of the peripheral filaments of the pneumogastric nerve; the slowing of the cardiac pulsations produces a great accumulation of blood in the organ, and this prolonged diastole must be followed by a more vigorous systole—hypersystole, as it has been called. If the muscular fibres of the heart are in an abnormal condition, if the nervous apparatus is out of order, the heart cannot resist such an increase of pressure, and, consequently, hypertrophy and dilatation of the cardiac muscle take place. The physician must then at this moment do all he can to sustain the nutrition of the cardiac muscle, and prevent any abnormal activity of it. If the heart continues to find a resistance, it will employ all its latent force; but after a while this will be insufficient, and then the symptoms of cardiac asystole make their appearance. To measure the force of the cardiac muscle, Dr. Cardarelli places a tourniquet on both femoral arteries, and records the sphygmographic tracings. If the latent force of the heart is a feeble one, there will be observed, following the compression of the arteries, a great disturbance of the circulation. If the heart is unable to resist the increased vascular pressure, blood-letting must be resorted to. No alarm should be felt at the depression which sometimes follows it. If the heart is found to be only fatigued, the drugs can be used which are stimulants of the cardiac contractions; but it must not be forgotten that the natural stimulant of the heart is stimulus of the intra-cardiac pressure.

As to the nervous affections of the heart, one must find out whether they are due to trouble with the pneumogastric nerve or with the great sympathetic. To know whether the cause of the disease is an excitation or paralysis of the pneumogastric nerve, the modification of the cardiac rhythm as produced by the pressure of the finger on the nerve trunk in the cervical region must be studied. The liver and stomach must also be carefully examined, as they often are the point of origin of the reflex.

Prof. de Giovanni, of Padua, referred to the discussions which have lately taken place in Germany, in regard to the method of Oertel; Dr. de Giovanni does not think himself that all cardiac patients should be condemned to a forced rest; but still he does not think that such patients should be allowed to take the violent exercises recommended by Oertel; these should be allowed only when the heart is sufficiently resistant to stand the pressure. As a test of the resisting power of the heart Dr. de Giovanni employs hypodermic injections of strychnia, which by producing a contraction of the capillaries interferes with the peripheral circulation; if the heart is able to resist this interference of the circulation, physical exercises may be recommended. This resisting power could be measured by giving gradually increasing doses of strychnia; in this manner the amount of physical exercise which the patient could stand could be regulated. He also employs as a test the elastic bandage of both lower extremities; but this test is a very severe one for patients whose cardiac muscle is severely involved.

Prof. Rummo detailed the treatment of cardiac diseases with medicines. He insists on the necessity of maintaining the activity of the cardiac muscle on a plane with the resistance which the heart has to overcome; he divides the cardiac drugs into three groups: First, Those that act directly on the myocardium, producing an increase in its contraction; they are: Strophanthine and helleborine. Second, Those that act specially on the muscle and cardiac innervation: Upas antiar, digitalis, erythrophleine, rose laurel (Nerium Oleander). Third, Those that act equally on the heart and its innervation: adonidine and convallamarine.

Prof. Murri, of Bologna, read a paper on

Fever and Antipyretics,

in which he said that as a result of his experiments he had come to regard fever as only a symptom of the disease which produces it, and not as of nervous origin. He has demonstrated this by extirpating the brain in pigeons and then injecting toxic subtances into their body. He found there

was a certain rise of temperature; the same elevation of temperature he obtained when he injected similar substances into the body of animals which had been dead from two to eight hours, by which time the nervous system had lost its activity. He does not think that the nerve centers regulate the loss of animal heat; for he passed a certain amount of warm water into the stomach and intestines of dogs, leaving in place the lungs and skin, which are the great surfaces by which heat is withdrawn from the body; and yet he obtained a persistent rise of temperature.

He is opposed to the use of antipyretic remedies, on the ground that fever is only a symptom of the disease and not a cause of it; moreover, he thinks that by allowing the fever to remain, the development of certain microbes is prevented, and in some cases that they are even destroyed.

Prof. Maragliano, of Genoa, does not think that fever can in any way destroy the pathogenous microbes, for Dr. Gaffky has proved that Fränkel's diplococcus resists a temperature of 107° F., and the typhoid fever bacillus a temperature of 106° to 107° F. He mentions the fact that soldiers who have made a forced march are sometimes found to have a temperature of 106° F.; without having been previously infected they yet present the symptoms of typhoid fever. This proves that an elevation of temperature is by itself sometimes a cause of disease; and he thinks that in infectious diseases the morbid phenomena observed are due to the fever, and hence must be combated by the proper antipyretic remedies.

Prof. Bozzolo, of Turin, does not think that antipyretics should be done away with, although he agrees with Prof. Murri as regards the influence of pathogenous germs in the production of fever.

Dr. Cantani, of Naples, also thinks that the existence of fever can prevent the development of certain microbes, and in the fever he only finds a reaction of the body against the morbid germs and their products. Instead of using the medicinal antipyretics, which act by diminishing the vital reaction, he prefers to employ such agents as aerations, cold baths, and the ordinary hygienic precautions.

Dr. A. Bianchi read a paper on

Tumefaction of the Spleen in Syphilis.

He has observed a very interesting fact, that the spleen increases in size in every case of syphilis, and assumes a pear-shape, the base of it directed downward. He found that this increase of size of the spleen begins with the appearance of the primitive chancre, attaining its maximum in the second stage of the disease. The mercurial treatment produces a diminution in the size of this organ.

Tuesday, October 23.

Prof. Cantani read a paper on the

Etiology and Treatment of Diabetes,

in which he defined diabetes as a general disease having its localization in the chylopoietic organs. The diminution of carbonic acid gas in the organism of the diabetic patient is a result and not a cause of the morbid process; it is consequent upon the diminution of the oxydation of hydrocarbons. The cause of diabetes he attributes to the too great use of farinaceous and sweet substances; in only rare cases does he think the disease is of nervous origin, and then it is only of a transitory character.

Having treated over one thousand diabetic patients, he finds that the best treatment is the complete suppression of the use of meat; if this is not done in a very strict manner, the sugar will rapidly appear again in the urine. He recommends the use of alkaline lactates, albuminous and fatty food, and alkaline waters, but rejects all the different preparations of bread, as well as medicinal treatment. He considers the cure a final one only when the patient can eat any food without any sugar appearing in the urine.

Prof. Cardarelli, of Naples, thinks that diabetes of nervous origin is more frequent than Dr. Cantani supposes; he has observed two cases in which a traumatism produced the presence of sugar in the urine; he has also observed that diabetes often precedes meningitis, especially in children. The treatment followed in cases of nervous diabetes is the absolute avoidance of meat as food, and this with excellent results.

Prof. de Renzi, of Naples, when he was at Genoa, observed that diabetes was extremely rare; he only met with one or two cases of the disease each year in his wards, and yet the inhabitants of Genoa are great meat eaters. While in Naples, where he now practises, the inhabitants almost altogether live on farinaceous and vegetable substances, and he meets every year in his wards with about forty to fifty diabetic patients. He also thinks that diabetes can have a nervous origin; sudden fright may

produce it. The treatment does not consist in the absolute exclusion of meat; but he allows his patients a certain quantity of it, combined with green vegetables and some wine. Prof. Maragliano does not pay great attention to the quantity of sugar contained in the urine; he watches his patient in regard to his weight; if a rapid decrease in weight occurs, he tries to sustain the patient's general nutrition as much as possible, and gives him a mixed diet, not excluding meat absolutely. He also adds milk and the preparations of strychnia.

Prof. Rummo thinks that some of the cases of diabetes which have been attributed to a nervous origin are due to the fact that primary disease had involved the nervous system early, and that the patient at the time of examination presented nervous symptoms, which made the physician think he had to deal with a case of nervous diabetes.

Prof. Baccelli, of Rome, says that in 1863 he presented the case of a young man who suffered from cerebral concussion after a fall, and died diabetic several years after; and at the post-mortem a cicatrix was found at the centre of the pons Varolii; in this case the nervous origin is unquestionable. In the puerperal states and in pregnancy, glycosuria of nervous origin is often observed.

Prof. Baccelli, of Rome, read a paper on the

Treatment of Hydatid Cyst,

in which he stated that he uses the following method: great antiseptic precautions being taken, about two and one-half drachms of liquid are taken out of the cyst with the hypodermic syringe, and an equal quantity of a solution containing from one-fifth to one grain of corrosive sublimate is injected in its place. The results have been most satisfactory; cure is obtained in about five days, during which time a slight febrile reaction is observed, but the liver returns to its normal form in about that time.

Wednesday, October 24.

Prof. Marchiafava, of Rome, read a paper on the

Plasmodium of Malaria.

He mentions the fact that during the former years only black pigment was observed in the blood of malarial patients, either free or included between the cellular elements; and it was thought to be a residue of the destruction of the coloring matter of the red blood corpuscles. He recalls the fact that for the first time in 1878, he discovered the change of hemoglobine into melanine in the interior of the red blood corpuscles, but never was able to explain this transformation. After the studies made in Algeria by Laveran, and afterward at the Anatomico-Pathological Institute of Rome, he thinks the following conclusion in regard to the destruction of the red blood corpuscles in malarial infection may be reached:

Certain microörganisms penetrate, under one form or another unknown to us, into the system by the inspired air, and from the lungs into the blood; in this last medium, these parasites invade especially the red blood corpuscles, and are found in the early stages as a protoplasmic form endowed with very active amœboid movements; they increase in size within the red blood corpuscle, and live at the expense of its coloring matter, changing this last into pigmentary deposits. These amœboid forms multiply by fission, and then invade new blood corpuscles, and this process continues.

The malarial parasite (*plasmodium malariæ*) is always in the early stages intraglobular, but later it presents itself under different forms. This plasmodium is the type of the intra-cellular parasite, and yet, although not a bacterium, it will produce a general infectious disease. In a doubtful case of malaria, the examination of the blood of the patient will settle the diagnosis. The malarial parasite lives altogether in the blood, and develops, multiplies, and dies in the red blood corpuscle. This parasite might die spontaneously, when a disappearance of the disease is observed; or, again, quinine may have a very marked effect in causing its destruction; but in any way the organism does not come out of the blood, unless taken out by blood-letting. This fact explains the non-contagious character of the disease; should blood of a malarial patient be injected into another man's blood-vessels a case of malaria would certainly be observed.

Dr. Mosso, of Turin, thinks that additional experiments are necessary to sustain the views expressed by Dr. Marchiafava. During his own researches, he has observed, while studying the blood corpuscles under invasion of the so-called parasite, that the protoplasm first becomes transparent, and afterward separates itself from the blood corpuscle. The same fact had been observed by Gaule some years ago, when, by acting on the frog's red blood corpuscles with a

solution of chloride of sodium, he observed that something came out of this corpuscle, and he thought he had to deal with a parasite, whereas, on the contrary, it was only a mass of protoplasm. The same changes Dr. Mosso himself has observed in the blood taken out of the human body; hence, he thinks that Dr. Marchiafava's plasmodium will be proved to exist only if he can prove that these forms are not the result of a degeneration of the cells, following their death; this so-called parasite must also be demonstrated as really penetrating into the red blood corpuscles.

Dr. Maragliano has also observed the changes described by Dr. Mosso as taking place in the red blood corpuscle; but he thinks they can be differentiated from the parasite by the fact that parasites have more regular contours.

Prof. Ferrati, of Catania, read a paper on

Puncture of the Spleen

for chronic tumors of this organ, of malarial origin. He has employed puncture of the spleen in many cases, with excellent results; in a person whose spleen measured sixteen inches in length and eight and two-tenths inches in breadth, the introduction of the needle three times produced a decrease of the tumor, of three fingers' breadth in length, and two in the transverse diameter. The experimenter was led to this method by a desire to know whether or not in the parenchymatous injections of certain liquids the introduction of the needle itself is the real cause of the amelioration.

Prof. Fazio, of Naples, read a paper on

Parenchymatous Injections of Quinine in Chronic Tumors of the Spleen.

He thinks these intraparenchymatous injections of quinine are more useful than puncture alone, as they combine both treatments.

Prof. Baccelli read a paper on the

Treatment of Neuralgia by the Hypodermic Injections of Carbolic Acid.

He injects a solution of one per cent. of carbolic acid into the painful part; he has obtained very good results, especially in cases of supraorbital, intercostal, and ischiatic neuralgias, and also in the articular pains of chronic rheumatism. This same treatment he has used in a case of tetanus, injecting the substance every hour; he used at first one-fifth grain of carbolic acid for each injection, then two-fifths grain. The spasms disappeared gradually, and the patient was well in eight days.

Dr. Sonsino, of Pisa, read a paper on the

Treatment of Ankylostomasia with Thymol,

in which he said he had to treat, some time ago, a young woman about 18 years old; she was anemic, had amenorrhœa, was not well developed for her age; she said that while in the country she drank water from a certain river. Iron was given her without success; examining the fæces finally by the aid of the microscope, he found he had to deal with a case of ankylostomasia; thymol was given her in repeated doses of sixty grains, and she evacuated about one hundred and thirty of the parasites. A few days later, the renewal of the treatment produced the evacuation of seventy more. The patient took twenty-three grammes (six drachms) of thymol in all. He recommends, in cases of intractable chlorosis, to search for the eggs of ankylostomata.

Before separating, the Congress selected Rome as the permanent place of reunion. The next meeting of the Congress is to be held in 1890; Prof. Baccelli, of Rome, will be President.

Reports of Clinics.

College of Physicians and Surgeons—Vanderbilt Clinic.

Medical Clinic—Prof. Delafield.

Pleurisy with Effusion.

The patient was a man, 26 years old, who has been sick two weeks, his illness beginning with a "stitch" in the right side low down in the axillary line. The pain continued, and was felt also in the front of the chest. Dyspnœa was also complained of.

He was well in every other respect—no headache, no vomiting, bowels regular, and appetite good. His temperature, when he first presented himself at the Clinic some days ago, was 101°; to-day it is 99.8°.

Examination shows the patient to be somewhat emaciated; his chest has the characteristic shape seen in emphysema of the lungs, that is, a bulging of the costal cartilages on each side of the sternum. The percussion note over the upper part of the chest in front has a different quality from that of the normal pulmonary resonance. The respiratory murmur is less distinct on the right side than it should be; on the left side it is good. The apex of the heart is in

normal position, and there is no murmur. Posteriorly the left side shows nothing abnormal. On the right side there is dulness from the middle of the scapula to its angle, and below this there is flatness. The breathing and the voice are heard to the line of the flatness. This, then, is a straightforward case of pleurisy with effusion. It illustrates well the slight effect this disease may have upon a patient. The man suffers now only from slight pain and some shortness of breath, and says he feels well able to go to work. It is easy to see how practitioners can overlook such a case; the symptoms being so slight they neglect to make a physical examination of the chest.

When this man first came under treatment the fluid reached to the middle of the scapula; now its limit is marked by the line of flatness and loss of respiratory murmur and voice on auscultation. This is a very good result, and it has been obtained by rest, the application of iodine to the chest, and the administration of a simple cough-mixture—really no treatment.

And yet rest is the most important element in the cure of these cases. Allow this patient to go to work, to expose himself to changes in the weather, etc., and in a few days his chest would be found half-full of fluid. But keep him at rest until the fluid has all disappeared and the patient has felt himself well for some little while, and a permanent cure will be obtained in the shortest time.

Dilatation of Stomach (?)

This patient was a man, 23 years old, a shoemaker by occupation. His work is not heavy; he has very little stooping to do; he does not press anything against his chest while at work. He has been sick one year, and complains of dull pain in the right side just below the free border of the ribs. It comes and goes. He has never felt it at night. At first it would appear only occasionally, and he might go two or three days without it; but latterly it has been growing worse, so that he has it now almost every day. In some weeks he has a respite, but in others the pain remains all the time. The patient does not complain in any other way; his appetite is good, his bowels regular, and he attends to his work. The urine shows a specific gravity of 1022; it is alkaline in reaction and does not contain albumin. Examination reveals nothing abnormal about either lungs or heart. The liver is normal in size and position. There is a fullness noted in the epigastric region, and on kneading this a distinct splashing sound is heard. But this man says he has eaten his lunch only two hours ago, and the knowledge of his coming here may have produced sufficient excitement to retard digestion. His stomach at present is full and dilated. But is this a pathological or a physiological dilatation? It is very common, at the present time, to make a diagnosis of dilatation of the stomach on imperfect data. To be pathological the dilatation must exist during the greater part of the time. In the present instance, having never seen this patient before, it would be impossible to make a positive diagnosis. If his stomach were at all times as large as it is now, it would certainly be dilated. In this patient there is simply a history of pain; and the character of the pain is such as to incline one to exclude organic disease. On examination we are able to add only two facts to this history, namely, the dilatation of the stomach and the alkalinity of the urine. This man has not been taking medicine to produce such an effect, and in a young man we do not expect to find alkaline urine. These three facts, therefore, point to *some* disturbance of digestion. The character of the pains—wherever they may be situated—are quite pathognomic of such a state; but our history does not cover a period long enough to make a positive diagnosis.

We shall instruct this patient to return next Thursday. During the week he will be allowed only one solid meal a day, and that to consist of meat and potatoes alone. For the rest, he may drink milk. He shall come to us without having previously eaten for three hours. We will then test his stomach contents, which will be removed with the stomach pump.

Chronic Endarteritis.

This patient was also a man; he was 65 years old, a native of Ireland, and a laborer by occupation. He has suffered for the past twelve years with attacks of unconsciousness, which come on suddenly so that he usually falls to the ground without having any premonition of their appearance. They last usually about fifteen minutes, and leave him without palsy or other sign except headache, so that he can return to work in one hour after the attack.

Sometimes the attacks are more severe. They have increased in severity as well as in frequency lately, so that he has had four during the last five weeks; two attacks occurred on last Wednesday. The patient has not worked for the past six months, though

he is able to work. He complains quite constantly of "tightness of head" and failing memory—though he is able to apply his mind; and also of very poor appetite; his bowels are somewhat constipated. There is no sleepiness during the day, and he sleeps well at night; there is no vomiting. On only one occasion were there noticed twitchings of the right side of the face; he has never had any other convulsive movements.

His urine has a sp. gr. of 1004, and contains no albumin. Examination shows the tension of the radial arteries to be decidedly increased; they are not large and not tortuous. The lungs show evidence of emphysema. The heart's action is feeble in proportion to the arterial tension. It is not rapid, and is regular; there is no murmur.

This patient represents a class of cases which is difficult and even uncertain of diagnosis. We are usually satisfied with a probable diagnosis. The man does not look ill, though he has been sick twelve years.

What is the matter with him? [The students suggested many diagnoses; tumor of the brain and chronic pachymeningitis—both of which Dr. Delafield remarked were possible; chronic Bright's disease—which he had no doubt the patient suffered from, but which would not account for his attacks; cerebral anæmia and cerebral congestion—which he styled loose talking; and chronic endarteritis of the cerebral arteries. The last was the correct diagnosis.]

Continuing his remarks, Dr. Delafield said: These cases are not so very uncommon. But how can the fact be explained that the man has been sick so long and looks so well, and yet is suffering from endarteritis? We suppose the same happens here as so often happens in cases of cancer of the stomach. How frequently such a patient is heard to declare that he has been complaining of his stomach symptoms for five years, whereas his cancer has existed but two years, and previous to this time he suffered from dyspepsia.

This man's urine, pulse, and heart-action point to endarteritis; but he has not had it for twelve years.

His first attacks were, in all probability, simply vertigo—of bad form to be sure, but such as are frequently associated with derangements of liver and stomach. Later on, the attacks became associated with true unconsciousness. The patient himself does not note this change in the character of his attacks; he simply sees their increase in severity.

Foreign Correspondence.

JOTTINGS FROM AROUND THE WORLD.

The Melbourne Hospital.—"Consultation Day."—Haphazard Teaching.—Rules Governing Hospital Pupils.—How Nurses are Encouraged.—A Clinical Lecture.

Melbourne, Oct. 1, 1888.

Since my last letter I have made a visit to the Melbourne Hospital. The medical superintendent, Dr. Lewellin, received me most kindly and made my visit interesting and profitable. The exterior of the building is not of an inviting appearance, and the wards within are decidedly old-fashioned. The hospital was founded in 1845; no conception of the future of Melbourne was then held in mind, so that the plan of building and the space allowed were not the same as if the founders could have seen clearly forty years ahead. The result has been constant additions and changes, so that the total effect is not altogether artistic. The medical staff consists of eighteen physicians and surgeons. Here again, as in the case of the Children's Hospital which I reported in my last letter, a committee acts upon the proper cases for charity; in fact, in 1864 an enactment passed the Victorian Parliament making it compulsory for each incorporated institution to be governed by a committee of not less than seven members, to be elected by the contributors. Even in emergency cases the committee allows to those who are able to pay only the most temporary assistance. My first visit was on Tuesday, which proved to be the regular consultation day, as it is called. On this day all new cases for operation are consulted on, a plan of procedure marked out, and the day of operation settled; the result of the consultation is entered in the consultation book, and the medical officers present attach their signatures to the statement. No important operation is performed without a consultation of this kind, and all such operations are performed only on Mondays and Thursdays, at 2.30 P.M. No operation is permitted on Sunday. This hospital is the chief source of clinical teaching for the University students, and on a closer examination of the clinical teaching here, I can but repeat what has already been said on this subject—that clinical teaching is very far inferior to our own in America. There is much haphazard teaching; there seems to be no system; to me it seemed to be in chaos. The remark was overheard: "What are you going to lecture

upon to-morrow, Doctor?" "Oh! let me see," was the answer; "do I lecture to-morrow? Oh, well, I will scare up something from the wards in the morning when I come, and I will give them something or the other." Passing into one of the wards I found bedside instruction going on; about thirty boys were collected about one bed; it was impossible for the most of them to see or even to hear. Poor hungry boys! The pathologist of the hospital is Prof. Allen of the University, of whom I spoke lately. In this particular the University is well served, as Prof. Allen has now the right to take all his specimens to the University, and to use them in class demonstration.

The rules governing the hospital pupils are of interest: after denying them free run of the wards without an officer of the institution, and assigning the exact hours at which they may be in the wards at all, a further useful rule is that they must not enter any ward on the same day on which they may have been in the dead-house, or present at a post-mortem examination, whether at the hospital or elsewhere; this is doubly insisted upon as regards entry into a surgical ward. At the commencement of each term of attendance a pupil must put himself under the charge of some physician or surgeon, and continue with him during the whole of that term. Before the commencement of every term of attendance, each pupil must pay to the Secretary of the Hospital the following sums, in addition to the fees charged by the University for attendance on clinical lectures: (1) For the use of the hospital, twenty-five dollars; (2) for the pathologist, six months, eleven dollars; (3) for use of the dispenser, sixteen dollars, each three months; (4) for the physician or surgeon whose practice the pupil attends, twenty-five dollars. Every hospital physician and every surgeon has two clerks or dressers, who are appointed from the medical students of the University by the medical superintendent, subject to the approval of the committee. These clerks are appointed for six months. I found the nurses here also well drilled, and of a superior character. The reason is evident: after two years' faithful service they have an increase in salary of twenty-five dollars per annum, and a further increase of five dollars per annum for each succeeding year of service, until the sum amounts to sixty-five dollars in excess of the original salary.

In the out-door department the one shilling fee for attendance is adhered to; this is the rule in all the charities in this city. Since the adoption of this rule, Dr. Lewellin says the service has been reduced greatly, which even now is too large, amounting on an average to sixty or seventy a day. Four separate funds are maintained, called respectively the maintenance, the building, the endowment, and the convalescent fund. The latter is interesting, being devoted to five objects, viz.: to defraying the expenses of patients going to the sea-side or to the country; to the purchase of clothing; to defraying the expenses of removing the patients to their homes; to supplying small sums of money to patients leaving, to assist in maintaining them until they are able to return to work; and to providing, partly at least, for the purchase of trusses and other instruments or appliances.

The hospital building is situated in the very heart of the city. Hearing that one of the clinical lectures was to be held the next day, at the appointed time I went and found Mr. Ryan in the arena. He is a genial man of about 40 years of age, and gave a clear lecture on cancer of the tongue, the text being supplied by a young woman who was thus affected. While the girl walked around, and a few general remarks were being passed concerning her, I took the opportunity to take in my surroundings. The amphitheatre was very small, three rows of seats for the students, of whom I counted just thirty-five present. The lecture must be compulsory, as the roll was called. This one case was all that was brought in. The opinion was given that the cancer of the tongue was the result of irritation of some rough teeth; the case had been seen some time before, when there was a true pre-cancerous ulceration, and the girl was then urged to have the teeth attended to, but after neglect she had come back in the condition mentioned. The lecturer insisted that very many cases of cancer of the tongue have their origin in some local irritation, such as teeth, or the improper use of caustics, etc. If there is need of caustics about the tongue, he would use a good one at once—the actual cautery or pernitrate of mercury. He thinks heredity plays very little part in the production of this kind of cancer. In his experience he has found secondary deposits in the internal organs very rare in this variety; why, he is not fully prepared to say. The essence of the lecture was that cancer of the tongue often comes from most trivial causes, and that all irritations and ulcerations in those above twenty-five years of life should be treated promptly and with the least meddling possible; and if operation is

deemed necessary, it should be done at an early date. He related how a mistake was made in that very arena by one of the best surgeons in the city, in diagnosticating cancer of the tongue when, by mere accident as the patient lay on the table ready for operation, it was discovered that the body was full of fresh syphilitic eruptions. On investigation it was shown that the young woman was a prostitute who used her tongue and mouth in sexual intercourse. The chief objection to the lecture is, it was rather too theoretical; the students have a surfeit of that already; it would have given a zest to the hour if more of the same or similar cases had been shown; or, if the hospital had no more cases of cancer of the tongue, to have grouped some of the cancers then in the building, for there were some, as I saw them in the wards after the lecture. To my mind, almost every step of a true clinical lecture should be illustrated from life, the differential diagnosis enforced by cases to the point, the prognosis shown by more advanced cases of the disease, or the same case presented to the class from time to time. Too often a lecture of this kind seems to bear the stamp of "anything to kill time." Especially in Melbourne, where the clinical teaching is meagre, the very best advantage should be taken of all that would carry any lessons to the students.

C. C. VANDERBECK.

LETTER FROM BERLIN.

Prof. Naunyn's Clinical Observations.—Relation of Fränkel's Pneumococcus to the Streptococcus pyogenes.—Persistence of the Spirochetæ of Obermeyer in Recurrent Fever for 14 days.—Multiple Arsenical Neuritis.—Paralysis from Injections of Ether.—Cause of Diabetic Coma.—Fermentations in the Stomach.—Therapeutics of Syphilis.—Curability of Cancer.—Creolin a Substitute for Creasote.

BERLIN, Nov. 9, 1888.

Professor Naunyn, the eminent clinician of Königsberg, who has just accepted a call to Strassburg, has published, as a sort of farewell present to his old northern University, a highly valuable collection of clinical observations. Your correspondent must content himself with alluding only to the most interesting parts of that publication. Prof. Naunyn has observed five cases of lobular pneumonia complicated with empyema, in which both Fränkel's pneumococcus and the streptococcus pyogenes were constantly found. These two microbes hold a certain relation to each other, inasmuch as one pathogenic germ prepares a favorable nidus for the other. Thus, the pus-germs easily develop and predominate in the lungs after the prior invasion of the pneumococcus. Naunyn also relates a case of recurrent fever, in which the spirochetæ of Obermeyer were observed for fourteen days in succession. Formerly it was always thought that these germs appeared in the blood only with the fever and disappeared after a critical fall of temperature. Of considerable interest are Naunyn's observations on paralysis as a symptom of acute arsenical poisoning. In chronic poisoning with arsenic, paralysis is not an unusual symptom, and in the acute toxic paralysis it is at times the only symptom apparent. This paralysis appears quite early, shortly after or in the course of the gastro-intestinal symptoms, and is an expression of a multiple nerve-affection rather than, as has been hitherto thought, of a spinal paralysis.

Of equal interest are Naunyn's observations on paralysis caused by subcutaneous injection of ether. Only a few cases of this ether paralysis have been described. In one case observed by him the paralysis was confined to the region of the ramus profundus radialis (posterior interosseous), while in another case the paralysis was sensory and affected the posterior cutaneous branch of the radial nerve, and lasted for three months. Naunyn believes that the action of an injection of ether (or oil of camphor) does not consist in any specific influence exerted by the ether on the central nervous system, but in a violent irritation of the peripheral sensory nerves directly affected. Another interesting statement made by Naunyn is that coma in diabetic patients is caused by oxybutyric acid circulating in the blood. This acid causes coma by depriving the blood of its alkaline constituents. Experimentally the author has also succeeded in checking the diabetic intoxication by supplying alkalies to the blood. It is therefore a fair inference that alkaline remedies are indicated in diabetic coma.

A larger essay of considerable practical importance is the one on fermentations in the stomach, from which we gather that the normal gastric contents, during the process of digestion, are almost free from germ-life, with the exception of some yeast-cells or some single bacteria. The filtrate of such gastric contents as contain free hydrochloric acid and pepsin may be kept for weeks in

an open vessel without any germ-life being observed. Indeed, the fluid can be inoculated with various microörganisms with impunity. This singular resistance to germ-life is to be attributed, first, to the free hydrochloric acid; for, if the gastric contents are neutralized with an alkali, germ-life develops quickly and abundantly. Pepsin appears also to have something to do with this resistance to microbes, for germs appear at once if the fluid is heated to the boiling-point and after being cooled inoculated with germs. This procedure of course destroys the pepsin. Bacteria cannot normally develop in the gastric juice, as they cannot escape the digestive action of pepsin. Naunyn mentions, as predisposing causes of gastric fermentations: 1. Mechanical insufficiency of the stomach, with secondary insufficiency of secretion, such as may occur in stenosis of the pylorus resulting from carcinoma, ulcer, or muscular weakness of the stomach. 2. Grave organic lesion of the gastric walls, with secondary insufficiency of secretion as occurs in broad carcinomata, and in atrophy of the mucous membrane. 3. Undue supply of neutralizing ingesta. As results of gastric fermentations Naunyn mentions: 1. Irritation of the mucous membrane; 2. Tympanites; 3. Auto-intoxication, such as dyspeptic coma; 4. Interference with normal mechanical procedures, such as peptonization and saccharization; 5. Disturbance of the intestinal functions by the entrance of irritating gastric contents into the intestines. As therapeutic measures Naunyn recommends in gastric fermentations: washing out of the stomach; antiseptic remedies, such as hydrochloric acid, or carbolic acid (three drops before meals); benzol, fifteen to twenty drops; or creasote (six drops). The diet should also be regulated, and a meat diet given in obstinate yeast-fermentation.

Naunyn is an authority on the therapeutics of syphilis. His latest suggestions in the treatment of syphilitic affections of the nervous system are very simple. He recommends, above all, an energetic inunction-treatment, *i. e.*, thirty to forty inunctions containing at least sixty or seventy-five grains of mercurial ointment. He has used as much as two and a half drachms for one inunction. The inunction is to last for fifteen or thirty minutes. Among other therapeutic measures, he advises careful attention to the mouth and skin, regulation of the bowels, selected and nourishing food, and exercise in fresh air. He orders iodide of potash from the beginning in doses of fifteen to forty-five grains a day. The duration of the entire treatment covers usually from eight to ten weeks. In diffuse nephritis and hepatitis mercury is to be used with caution, as it is ill borne.

The case of the Emperor Frederick has naturally again directed the attention of the profession to the medical treatment of cancer. Neudörfer has just published an interesting little pamphlet on the subject. Carcinosis, the author says, is very probably just as curable as syphilis or phthisis. The excision of a carcinoma, as of a hard chancre, is, as a rule, not far-reaching enough to prevent the infiltration of the surrounding tissues with the specific microbes and cells. He believes that the medicinal treatment of cancer should be tried more extensively than has been the case hitherto. The rind of condurango and Chian turpentine have often given promising results. There are also, as in phthisis, climates favorable for cure. On the plateau of Mexico and at the Cape of Good Hope, for instance, cancer is an exceptional disease. The principal office for the surgeon, in Neudörfer's opinion, is not the extirpation of the neoplasm, but the medicinal treatment of the cancer-cachexia, which is the chief factor in bringing about the death. The treatment of cancer is naturally much like that of phthisis. Creasote, which has been found to stimulate the nutrition of the blood-corpuscles, is of equal value in cancer and in phthisis. He has obtained decided results in the treatment of cancer with the following preparation:

℞ Creasoti puri,
Sodii bicarb.,
Olei morrhuæ . . . . . āā f ʒ v
M. Put in 100 gelatine capsules. Take three capsules three times daily after each meal.

A very eligible substitute for creasote is creolin, as it is not only cheaper than the latter, but is also a stimulant of digestion. He prescribes:

℞ Creolin . . . . . ♏ xv
Ext. glycyrrhizæ, q. s. ut ft. pil. No. 100.
Sig. Three pills three times daily.

Locally, Dr. Neudörfer prescribes, with the above pills:

℞ Creolin,
Ichthyol,
Iodide of potash . . . . āā gr. xi
Vaselin,
Lanolin . . . . . āā gr. xv
M. F. ung. Sig. Rub into the part three times daily.

Neudörfer boasts of three actual "cures" of cancer obtained with this treatment.

PERISCOPE.

Influence of the Menstrual Periods Upon the Sex of Children.

At the meeting of the Biological Society of Paris, October 13, 1888 (*Bulletin Médical*, Oct. 17, 1888), M. Dupuy stated that from the study of the statistics of more than two hundred families (over one thousand children) he had found that, the sex of the first child being known, it was possible to predict what would be the sex of the children yet to be born, and in some measure to choose the sex. He then went on to say: The first child being conceived in a menstrual period which we will designate by 1, if the child is a boy, all the children which will be conceived, for example, in the 11th, 13th, 15th, 105th, 107th, 109th, etc., menstrual periods following, will also be boys. All the children which will be conceived in an equal menstrual period, that is to say, in the 12th, 14th, 16th, 106th, 108th, 110th, after the first conception, will be girls.

So, says M. Dupuy, if the father of a family desires to have a girl, after having had a boy, he should count the number of menstrual periods passed by his wife since her last confinement, and bring about pregnancy in an equal menstrual period after the first confinement. If the first child, however, was a girl, then pregnancy should be secured in an odd period. All the children born in a twin pregnancy with a single placenta follow the rule.

He adds that this rule is true only for the children of the same couple. If one of the two parents changes, the count must be made afresh from the first confinement. M. Dupuy declares his ignorance of any cause for this regularity. He has established its existence empirically.

Terebene.

Dr. D. M. Cammann, in a paper upon observations on the use of terebene, gives the following summary of his results: Thirteen cases were of chronic bronchitis, most with more or less extensive pleuritic adhesions. Three were of acute bronchitis, ten of emphysema, two of asthma and bronchitis, ten of phthisis, one of pleurisy, and one of the third stage of pleuro-pneumonia. Two of these, both cases of acute bronchitis, were cured, one in four and the other in eleven days. Thirty-three cases were improved, most of them markedly, but a few only to a slight degree. Five were unimproved, two of the patients being obliged to discontinue the drug after two or three days, as it produced vomiting. The shortest time the treatment was continued in any case was four days, the longest time six months. The average length of treatment was a little over twenty-six days. Most of the patients took fifteen minims and some as much as half a drachm in a mucilaginous mixture four times daily. In all except three, the cough was improved, becoming softer and less frequent. In twenty-six, the quantity of the expectoration was lessened; in four it was unchanged, and in two it was increased. The latter were under treatment only one week, and it was found in some of the other cases that the expectoration was increased for the first few days and afterward diminished. In seventeen cases the expectoration became thinner and more watery; in six it was no thinner. In the other cases no note was kept in regard to this point. In those troubled with dyspnœa, the dyspnœa was diminished in thirteen and undiminished in eight. The patients noticed an increase in the urine in nine cases; no increase was noticed in fifteen. In many of the cases the appetite improved. In two cases the terebene caused vomiting, in two nausea, in one dizziness and nausea, and in two dizziness. These symptoms usually disappeared when the dose was reduced. It is beneficial in affections of the bronchial mucous membrane, both acute and chronic. It relieves the dyspnœa of emphysema, it is readily borne by the stomach, and it seems to have a resolvent action on pleuritic adhesions.—*N. Y. Med. Journal*, Nov. 10, 1888.

—The Trustees of the University of Pennsylvania have accepted the resignations of Prof. D. Hayes Agnew, from the Chair of Surgery, and of Prof. William Osler, from the Chair of Clinical Medicine. Both resignations are to take effect at the close of the present session, in 1889. Dr. John Ashhurst, Jr., has been nominated for the position to be vacated by Dr. Agnew.

—Dr. C. B. Shute and some Malden officials, says the *Ledger*, Nov. 28, went to Worcester some weeks ago to see a new patent ventilator in a hospital. Dr. Shute and Alderman Clark descended a shaft into which was blown the foul air from the building, in which were several typhoid fever cases. Dr. Shute died of the disease and Alderman Clark is down with what is regarded as a fatal attack of it.

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APPARENT DEATH IN THE NEW-BORN INFANT.

Everyone, with even a moderate obstetric practice, meets occasionally with cases of apparent death in the new-born infant. The subject is of interest not only from its exceedingly practical nature, but from the fact that neither the pathology nor the treatment of the conditions presented is absolutely settled. Further investigations are needed to determine whether the states of lividity from congestion, and pallor from anæmia of the superficies, are etiologically the same, and but different stages of the same process; or are as different in their etiology and real nature, as in their external appearance. No matter which view is correct, the usual division is important in both prognosis and treatment.

For the less serious cases, in which, although cyanosis is present, respiration is feebly and imperfectly performed, nothing succeeds better than the simple expedient of irritating the skin along the spine by somewhat vigorous friction with the fingers. Respiration and vigorous crying are soon established. In this particular class of cases nothing has given so much satisfaction as this manœuvre. When cyanosis is more marked, and especially if there is reason to think from a history of prolonged second stage that attempts at respiration have been made before birth, with aspiration of fluid into the air-passages, the mouth and throat should be cleared of mucus, etc., by a cloth introduced on the finger. The usual practice, under these circumstances, of immediately cutting the cord and allowing one or two drachms of blood to escape, before applying the ligature, probably relieves the heart and is to be commended; but much time should not be thus consumed. A hot bath favors bleeding and at the same time stimulates respiration. Cold water or brandy may also be sprinkled from a height at intervals to cause inspiration; but it seems to us that the plan of dipping a new-born infant into cold water should be used only under exceptional circumstances. Inversion of the infant is a logical and valuable method of treatment in all stages of asphyxia, and should be resorted to early. The other measures of treatment can be, at least in part, applied with the infant inverted. The judicious use of these measures will bring about respiration in the vast majority of cases of asphyxia livida. In some cases artificial respiration will be necessary. Sylvester's method can easily be used with the infant in an inverted position. Each of the other methods of producing artificial respiration has certain advantages. Schultze's method has few adherents in this country. Its apparent brutality will hardly permit it to be popular with the laity.

The methods of Byrd and Goodell are similar in principle and execution, and, owing to the gentleness of the manipulations employed, are especially applicable to feeble infants.

The prognosis is much more grave in asphyxia pallida; great feebleness in the action of the heart is added to the absence of respiration. Cutaneous stimulation by means of the hot bath, with intermittent sprinkling with cold water is not likely to succeed. Flagellation, which is permissible and useful in the livid form, is contra-indicated, lest the feebly acting heart should cease to beat. The cord should be quickly cut, the upper air-passages cleared of mucus, and artificial respiration resorted to, care being taken that the head is kept lower than the body. We prefer the method of Sylvester or Goodell, because of the less amount of exposure that is necessary, and less amount of shock that is inflicted. Jacobi has made the valuable recommendation that an enema of water at a temperature of 104° to 108° Fahr. be given. Perhaps a few drops of brandy could be added with advantage. Faradization of the phrenic nerve is a promising expedient, and of even greater promise in the livid form. One pole should be applied over the sterno-mastoid muscle, the other over the diaphragm. One electrode should be kept stationary, the other applied intermittently to bring about inspiration. Unfortunately a battery is not always at hand. Direct insufflation is at times resorted to, but has serious disadvantages. Where all secretions have not been removed from the throat, this foreign material is liable to be driven into the trachea and bronchi. The method of insufflation through a catheter, unless used with great care, is liable to cause rupture of the pulmonary air-vesicles and interlobular emphysema, as we have seen in one case. When mouth-to-mouth insufflation is used the stomach is likely to become inflated and still further embarrass respiration. Owing to the inherent dangers of the method, direct inflation should not be employed until more simple measures have failed. As a *dernier ressort*, in some cases, tracheotomy has been done and the catheter introduced directly into the trachea. Nor should it be forgotten that too much may be done, especially in feeble infants. Many cases are on record, similar to those reported by Goodell, in which the child has been put aside as dead, after failure of the usual methods of treatment, and afterward has been found alive. These cases show that the prognosis is sometimes worse in appearance than in reality.

TREATMENT OF FRACTURES AT THE ELBOW-JOINT.

In a very interesting paper in the *Archiv für klinische Chirurgie*, vol. xxxvii, part 3, Dr. Carl Lauenstein, of Hamburg, advocates treating fractures of the humerus at the elbow-joint with the forearm in a position of extension, instead of, as is customary, in a position of flexion. He was prompted to this practice by studying the condition of the elbow-joint in the person of a patient who died within a year after being treated in the usual way. The specimen showed that flexion of the arm had been secured at the expense of the fragments, and not in the joint.

This discovery led to further study of the anatomical conditions present in fractures of this sort, and Dr. Lauenstein came to the conclusion that the ordinary treatment is almost inevitably followed by permanent deformity of the arm, and that this misfortune would be avoided if the arm were kept extended while the reparative process goes on.

These views appear to have been arrived at by independent observations on the part of Dr. Lauenstein; but many of our readers are no doubt aware that they are not new; for in 1880 Dr. O. H. Allis, of Philadelphia, published, in the Annals of the Anatomical and Surgical Society of Brooklyn, an admirable paper, illustrated by drawings which are closely paralleled by those in Dr. Lauenstein's paper, and advo-

cating the same method of treating fractures at the lower end of the humerus.

Both of these papers suggest a very important point in the management of these fractures, namely, the avoidance of a deformity which consists in altering the normal relation of the position of the forearm to that of the upper arm.

The method proposed has much in its favor; but we think that good arms can be secured without departing from the more convenient and comfortable method of fixing the forearm in flexion. For this, however, one point, which is often, we fear, overlooked, must be constantly borne in mind, namely, that in the normal arm the axis of the forearm is placed at an obtuse angle to the axis of the upper arm. The rectangular splint generally employed in the treatment of fractures at the elbow-joint almost of necessity brings the axis of the forearm into the same plane with that of the upper arm, and this can only be done by forcing the lower fragment into an unnatural position. The result is sure to be a permanent deformity, and more or less functional disability.

To avoid this, the splint should be made with a double angle: one in the vertical and one in the horizontal plane, and these should correspond exactly to the angles of the uninjured arm. With this precaution, results can be obtained which leave nothing to be desired, and there is no good reason why deformity and impairment of function should be looked upon as a natural consequence of fractures of the humerus at the elbow-joint. A correct knowledge of the normal position of the forearm in flexion, as well as in extension, and a fair degree of mechanical skill would prevent a large number of the unfortunate results after fractures of this sort, and those who do not feel safe in treating them with the arm flexed would do well to adopt the method so forcibly demonstrated by Dr. Allis and now supported by the later arguments of Dr. Lauenstein.

INTRAPERITONEAL CYSTOTOMY.

Among the interesting publications on the subject of supra-pubic cystotomy which have recently appeared is one by Professor Rydygier, of Cracow, cited in the *Wiener med. Presse*, September 30, 1888, in which he recommends opening the bladder by an incision through the part of it which is covered by peritoneum. He is prompted to adopt this method by consideration of the difficulty of obtaining union by the first intention after an ordinary supra-pubic cystotomy, and of the tendency of the peritoneum to adhesive inflammation. In order to test the applicability of this plan, Rydygier made a series of experiments on dogs, and then, last December, performed the operation on a boy thirteen years old, who suffered with stone in the bladder. The result of this operation, and of several others on older patients, has been entirely satisfactory, union by first intention having followed in every case. This experience leads him to propose opening the bladder through the peritoneal cavity for the removal of vesical calculi, or of neoplasms in the bladder, as a formal method.

There can be no doubt that the dread of wounding the peritoneum, which has long been regarded as one of the greatest dangers in supra-pubic cystotomy, has always been much exaggerated; both in respect of its frequency and in respect of its consequences.

In 1875, Dr. Dulles, in analysis of the largest number of cases ever collated—at that time—found but three in which the peritoneum was said to have been "cut" or "burst," and but six in which death was attributed to peritonitis. These all occurred before the operation of supra-pubic lithotomy had attracted the attention which it has secured during the last thirteen years. At the present day, it may be said that an involuntary wounding of the peritoneum may always be avoided by a proper combination of anatomical knowledge and manual

dexterity; and, in the present status of abdominal surgery, an unavoidable wounding of the peritoneum can hardly be regarded as a formidable accident, or as one which would materially increase the slight inherent risks of a supra-pubic cystotomy.

A deliberate opening of the peritoneum is a somewhat different matter. Rydygier is not the first surgeon who has operated in this way. As long ago as 1723, Præbisch is said to have opened the peritoneum intentionally in order to remove a stone from the bladder. In 1871, Mr.—now Sir—Joseph Lister undertook a supra-pubic lithotomy on a boy, in Edinburgh, and accidentally cut the peritoneum. His patient recovered so nicely that he soon after operated upon a man, and, relying upon his antiseptic methods, deliberately opened the general abdominal cavity and cut into the bladder where it is covered with peritoneum. This patient, however, died. In 1881, Langenbuch proposed opening the bladder through the abdominal cavity by a peculiar method *en-deux-temps*, which seems never to have been actually practised.

These facts are of historical interest in considering Rydygier's proposition, but they do not affect the credit to which he is entitled for placing the method of intra-peritoneal cystotomy on a basis thoughtfully planned, supported by experiment, and confirmed by actual experience on the human subject. Some acquaintance with the subject of supra-pubic cystotomy leads us to believe that the method suggested by Rydygier deserves the careful attention of surgeons, and that further experience may show that the bladder may be as safely opened through the abdominal cavity as through the prævesical tissues, and with a better chance of subsequent union by the first intention. Such a method would certainly be easier to carry out; and, if it proved successful in the hands of other operators, it would undoubtedly inaugurate a new era in cystotomy.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

TREATISE ON THE DISEASES OF WOMEN. By Alexander J. C. Skene, M.D., Professor of Gynecology in the Long Island College Hospital, Brooklyn, N. Y., etc. Illustrated with 251 Engravings and 9 Chromo-Lithographs. 8vo, pp. 966. New York: D. Appleton & Co., 1888.

This work is written from a clinical standpoint. The subjects of the anatomy, physiology and pathology of the female sexual organs are not elaborated—only enough is said about them to enable the student and practitioner to appreciate the natural history of the diseases of these organs and to treat them intelligently. A feature of the book is the insertion of reports of cases, placed at the end of each chapter, to illustrate the principles set forth in it; or, to represent a-typical or complicated conditions. There is an interesting chapter devoted to gynecology as related to insanity in women, and the section on the diseases of the bladder and urethra embraces a third of the volume. While this detracts from the proportions of the book, viewed artistically, it adds very much to its practical value.

The operation for the cure of fistula in ano, by careful denudation and suturing, is noticed favorably, as likely to bring about a cure and preserve continence of feces. A more than usually favorable prognosis is given in regard to the catarrhs of the uterus. The pipette is used to make intra-uterine applications instead of the applicator or the generally abandoned syringe. The intra-uterine stem pessary is in high favor with Dr. Skene, but its dangers are sufficiently dwelt upon. He also relies upon the hypodermic needle and the larger aspirator more than the progressive surgeons of to-day; and he has not joined those who regard the tapping of ovarian or other intra-abdominal cysts as unjustifiable except under rare conditions. Early ovariotomy is not insisted upon.

The author's treatment of flexions is striking. Flexion is considered a deformity, and, in the chapter devoted to its consideration, only flexions resulting from error of development and from inflammatory or degenerative disease of the parenchyma of the womb are discussed.

The chapter devoted to the anatomy, physiology and injuries of the pelvic floor is in most respects admirable. The author still talks about the "perineal body," but this we can forgive him, since he makes it plain that this so-called body is simply a part of the supporting segment of the pelvic floor; that its functions do not depend on its being a wedge of indifferent tissue interposed between the outlets of the rectum and vagina, but upon the fact that the muscles of the pelvic floor, levator ani, transversus perinei, bulbo-cavernosus, and sphincter ani, centre here. This important fact is well brought out and the injuries of these structures are considered; and not lacerations of mere skin, mucous membrane and connective tissue. The descriptions of the various operative procedures for the cure of these injuries we think could have been made plainer, and the operation recommended for so-called incomplete laceration is not the one we have considered best; but the principles laid down are so sound and true that the practitioner fully imbued with them cannot but obtain good results.

The subject of the dislocations of the uterus is presented better than in any work with which we are familiar, excepting perhaps Hart and Barbour's Manual.

In the preface it is stated that unsettled questions are omitted. Perhaps this accounts for the chapters on diseases of the ovaries, pelvic peritonitis and pelvic cellulitis. Had these been written five years ago they would be considered excellent. But the advances made since that time are only dimly hinted at, and not clearly presented.

Lack of space prevents a consideration of the work in further detail. We regard the book as one of the best extant on gynecology, and especially so for the student and general practitioner; and we think that but few specialists can read it without profit as well as pleasure. The illustrations are of more than usual excellence, and many of them are original. The printing also is good, but the paper is rather poor.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

156. Chronic Pyelitis, Successfully Treated by Kolpo-Uretero-Cystotomy. Irrigation of the Pelvis of the Kidney, and Intra-Vaginal Drainage. By Nathan Bozeman, M.D., New York. From the *Amer. Journal of the Med. Sciences*, March and April, 1888. 19 pages.

157. Renal Tenesmus. By Nathan Bozeman, M.D., New York. From the *Medical Record*, Aug. 4, 1888. 36 pages.

158. The American Hip-Splint. By Dr. A. B Judson, New York. From the *Transactions of the Ninth International Med. Congress.* Vol. III. 4 pages.

159 The Electro-Magnet in Removal of Steel from the Interior of the Eye. By Alvin A. Hubbell, M.D., Buffalo, N. Y. From the *Buffalo Med. and Surg. Journal*, July, 1888. 8 pages.

160. Tubercular Diathesis. By W. C. Chapman, M.D., Toledo, Ohio. From the *Columbus Med. Journal*, July, 1888. 9 pages.

161. Heredity. By James Thomas Learcy, of Tuscaloosa, Alabama. From the *Transactions of the Med. Association of the State of Alabama.* 16 pages.

162. Some of the Advantages of the Union of Medical School and University. By William H. Welch, M.D., Baltimore, Md. From the *New Englander and Yale Review*, September, 1888. 19 pages.

156. This paper by Dr. Bozeman contains a portion of what appears in his more extensive paper read before the Ninth Inter. Med. Congress, and already noticed as pamphlet No. 154, in these columns. It is based upon his study of and experiences with a patient whom he treated successfully by the method here described, and is admirably illustrated.

157. In this paper Dr. Bozeman discusses a curious condition which he distinguishes from what is commonly called renal colic, and which he states to be a "frequent result of chronic cystitis and ureteritis, in contradistinction to pyelitis, the usual result of urethrocele, cystitis and ureteritis." He also describes fully the method of treatment which has proved most satisfactory in his experience.

158. Dr. Judson's pamphlet contains a short, but excellent, historical sketch of the invention of the American Hip-Splint, and explains how it is entitled to the name. In addition he gives some important practical points in the early diagnosis of hip-joint disease, and one or two hints in regard to its treatment. His pamphlet also contains three figures showing certain modifications in the hip-splint which he has designed.

159. Dr. Hubbell describes the use of the electro-magnet for the removal of fragments of steel from the interior of the eye, and a form of magnet, of unusual power, which he had made by an electrician. This instrument is of convenient size, and its efficiency has been proved in two cases. His pamphlet contains an illustration of the magnet, and good description of the way in which this method of extraction should be carried out.

160. Dr. Chapman's paper, which was read before the Ohio State Medical Society, contains a thoughtful and interesting study of phthisis, and lays great stress upon the hereditary tendency of certain individuals to develop the disease. The author inclines to the belief that it is a mistake to apply the term solely to cases in which tubercle bacilli are found, and that other micro-organisms may set up the process of wasting and destruction of the lungs which is popularly called consumption. We can heartily commend his pamphlet to the attention of our readers, who will find it full of instructive and suggestive thoughts.

161. Dr. Learcy's pamphlet contains a study of the principles of generation, and an argument for the view that physical and mental characteristics are the result of inheritance, and that their cultivation depends upon repeated action. The author seems to be a pronounced believer in the doctrine of evolution, and states his belief that man was originally a-sexual, the female being the type of the species and man a variation from it.

162. In this address, which was delivered at Yale University, June 26, 1888, Dr. Welch makes an able argument for the union of medical schools with universities, or rather, for the formation of medical departments in universities, as an integral part of them. The example of German medical teaching, and the high development of the science of medicine in Germany, furnish a motive to much that he says; and all that he says is with the object of elevating the standard of medical education in the United States.

We cannot here repeat or even summarize his argument; but all the friends of higher medical education in the country would do well to study it for themselves.

—The annual banquet of the Ex-Resident and Resident Physicians of the Philadelphia Hospital, Blockley, was held at the Colonnade Hotel Dec. 4. Dr. Elmer, of Bridgeton, N. J., was elected President for the ensuing year.

CORRESPONDENCE.

Prevention of Conception.

TO THE EDITOR.

Sir: It seems to me that this subject is an important one and that it deserves careful consideration from medical men. We know that many, in all classes, are experimenting for the purpose of limiting the number of offspring, and that many women who marry nowadays either have a preventive which they intend to try, or hope to find one.

An inquiry into the cause for this state of affairs is certainly within the province of a medical journal. There can be no doubt of the desirability of preventing conception in cases of deformed pelvis, and all anomalies of the body which make delivery impossible; but I am not so sure of the desirability of preventive measures in all cases of syphilis, tuberculosis, deaf-mutism, derangements of nervous equilibrium, etc. When persons known to be subject to these disorders are allowed by law to enter into an alliance, the primary object of which is to perpetuate the species, the physician is not bound to interfere after the agreement is binding, unless the case is an aggravated one. The reason for such an opinion lies in the fact that preventive measures, if applied promiscuously to even one class of cases, would spread too far. Women even more than men dislike toil, hardship and suffering; and if it were once perfectly clear to the female mind that she is at liberty to limit this most disagreeable duty she would do it. The talk about mother-love being sufficient to make the human female endure the ordeal of delivery in order to become possessed of offspring is nonsense. Her nature may be altogether changed by circumstances, so as to bear but slight resemblance to what we are accustomed to consider natural. Witness the character of the Roman women who could calmly see men eaten by wild beasts, or butchered by their fellows!

On the whole, man cannot improve upon the Creator's plans for populating the earth. Women seek relief from the burden, because their physical suffering is too great to be borne. If the wife cannot influence the husband to have mercy on her in this respect, the physician should not be expected to atone for his brutality, and practically to cultivate his evil passions instead of relieving both of a grievous burden.

Women's health is an argument strongly urged; but conception may be a means of obtaining at least partial rest for the sexual function. If immunity from conception were guaranteed, women would be more willing to permit sexual indulgence. The evils of excessive venery would then become factors in the lives of both husband and wife. In this discussion the unfortunates who indulge their appetites out of wedlock receive neither countenance nor consideration, and no scheme for the conduct of married life concerns them. Yet they are made of the same flesh, and feel the same anguish, and present as many difficulties in the time of gestation as their virtuous sisters. The harlot, with no chance at all to make her offspring comfortable and happy, is consigned to torment, while it is proposed that those who have many kind offices to bestow upon their progeny should be told how to keep them unborn.

Perhaps it will sound like heresy to say so; but observation teaches that the greatest source of ill-health in mothers is not the bearing of children, but the way they spend their lives. How many physicians can think of half a dozen women who make a proper use of all the means within their power to make their bodies perfect? When an effort is made to have a patient, who complains that bearing children is exhausting her vital strength, or who really needs a tonic to the nervous system for some other reason, carry out a hygienic plan of treatment, the result is often far from satisfactory. Children were once considered necessary to furnish material to replenish the decimated ranks of armies; to cultivate the soil, to found colonies; and their appearance was welcomed with joy. The patriarch's wife said: "*Give me children* or I perish." The American wife cries: "*Give me no children lest I perish.*"

During the past week the writer attended a young woman in her third confinement. She has been married five years, and is the mother of three living children, and has had one miscarriage. Her husband is a healthy young farmer, and she is small, though well proportioned. After her confinement was over she said: "Now, Doctor, what shall we do to keep from having babies after this?"

In a case like this, what should be done? It is sincerely to be hoped that the present discussion may give us more light, if we are not justified in absolutely refusing to prescribe a prevention for conception.

Yours truly,

JAMES E. FREE, M.D.

Benezett, Pa.,
Nov. 22, 1888.

Treatment of Boils.

To the Editor.

Sir: In the Reporter, Nov. 17, 1888, I notice an article on "A Crop of Boils," by Dr. William M. Capp, in which he gives the pathology of the affection in a very scientific way. This leads me to believe that he understands the nature of boils. But his treatment is too skillful and overlooks the fact that a faulty nutrition is the cause of boils; if he will direct his treatment to the organs of digestion and introduce iron into the blood in such a way that it will be assimilated and build up broken-down tissue, he will, I think, succeed in curing boils.

I beg leave to suggest the following treatment:

℞ Tinct. ferri chlor. . . . . gtt. xv
Liquor potassii arsenitis . . . . . gtt. iii
Aquæ . . . . . f℥ ss
Take at a dose after each meal.

Use locally carbolized camphor, and a poultice when there is much inflammation. Also give small doses of Epsom salt to prevent constipation. This treatment will add another to the list of "sure cures."

Yours truly,
T. L. Craig, M.D.

Benedict, Kansas,
Nov. 20, 1888.

Erratum.

The last two lines on page 645 of the Reporter, November 24, should read: "The Medical and Surgical Reporter for Oct. 27," instead of for "Nov. 3."

Yours truly,
Ernest C. Helm.

Beloit, Wis.,
Nov. 27, 1888.

—The Board of Health of Jacksonville, Fla., has adopted resolutions permitting all persons to enter the city in day-time after Dec. 10, and all refugees to return without restriction by Dec. 15.

—Dr. W. B. Dorsett communicates to the *Weekly Med. Review*, Nov. 24, 1888, an account of a case in which a baby at birth had the lower two-thirds of the stomach and all of the small intestines, as far as the ileo-cæcal junction, including the greater portion of the mesentery, entirely outside of the abdominal cavity. An operation was done for the deformity, but the child died.

Notes and Comments.

Sand-Bur in the Larynx.

Dr. William B. Dewees reports the following case in the *Kansas City Med. Index*, Oct., 1888.

Miss B——, 21 years old, while out walking with companions, picked several sand-burs from her dress, which in turn fastened to the kid glove on her hand, from whence she endeavored to dislodge them with her teeth. Engaged in this act, a sudden, unguarded inspiration carried one of the burs into her throat, lodging in the larynx. The immediate suffering and excitement promptly brought the father with a carriage to the rescue, who forthwith conveyed her to my office. A careful, thorough examination, aided by Tobold's large reflector and lamp, proved vain to locate the foreign body. Localized pain within the larynx, an irritative, hacking cough, painful deglutition and hoarseness of voice, which was scarce above a whisper, constituted the leading train of symptoms. All considered the case as manifesting no immediate seriousness, and accordingly an expectant course of treatment was adopted, which consisted in advising absolute quiet in regard to speech and spraying the larynx and adjacent parts twice daily with a ten per cent. solution of cocaine.

The case progressed favorably, nothing in addition to the foregoing symptoms manifesting itself, except a blood-tinged expectoration, until the tenth day, when, soon after rising in the morning, a violent fit of coughing was invoked, which brought forth the *entire bur*, imbedded within a coating of mucus. Immediately all suffering ceased, the voice gradually regaining its normal tone.

Latent Carcinoma of the Dura Mater.

At the meeting of the Berlin Medical Society, October 11, 1888, Dr. Loewenmeyer exhibited a cancer of the dura mater, which had produced three large perforations in the skull. The specimens were removed from a man 44 years old, who died of carcinoma of the lung. A strange thing is that the tumor of the dura mater, in spite of the considerable destruction which it had made in the skull, had not produced the least symptoms; and it was a great surprise to meet with it at the autopsy. Large tumors of the dura mater are nearly always sarcomas; but in this case the structure of carcinoma was as nice as possible.—*Bulletin Médical*, October 21, 1888.

Glycerine Enemata in Children.

In a communication to the *Lancet*, Nov. 10, 1888, Mr. G. A. Carpenter says that during the past four months glycerine enemata have been used at the Evelina Hospital to the exclusion of purgatives, for the treatment of constipation among the patients. He gives a tabular statement of the results obtained from 214 injections given to 63 children, and says that an action of the bowels followed in five minutes or under in ninety-five instances; in ninety in thirty minutes or less; while in four the time was not recorded. Fifteen injections failed to relieve within the above-mentioned times, and intervals varying between thirty-five minutes and eleven hours were noticed in these. If one analyzes, he says, the fifteen instances in which more than thirty minutes elapsed before any action of the bowels took place, it will be noticed that they occurred in ten children, of which the most marked, as regards the length of time elapsing, are the cases of two special patients. It is worthy of note, he says, that five of the ten cases were suffering from tubercular disease in some form or another; three were osteotomies, and in consequence restrained from movements; one was a fractured femur treated in a double Bryant's splint; and, lastly, one was a case of chorea, in which, as is often the case, constipation was marked. Seven of the ten children were girls.

Coming to the failures, he finds that an osteotomy (in a girl) was accountable for a want of success and a return of the injection on three occasions; but in this child the injections were attended with success on eighteen different occasions, the bowels being relieved with one exception within the half-hour. In a case of tubercular disease of the spine, the first glycerine enema acted efficiently, an evacuation of the bowels occurring in five minutes; but a dose of three drachms failed later on, and a repetition gave no relief. This also was a girl. A knee excision (in a girl) shows one failure and three successes, the average time required for the injections to act being thirteen minutes. In the case of a child suffering with meningitis, the enema was returned, and not repeated. In a child with "pulpy" elbow, there was one failure and two successful injections. A case of suppuration of the antrum, he says, is responsible for one failure and one success. Five of these children were girls, and one was a boy. In all of the failures it will be noted that the bowels were capable of responding to glycerine stimulation at one time or another, and in no case was there complete failure.

As regards the quantity of glycerine used for an enema, he states that one drachm was given to 156 cases; a drachm and a half to forty-eight; two drachms to seven; and on two occasions three drachms were injected. In 154 instances the injections were followed by normal motions; in twenty-six the motions were loose; in eighteen they were of more than natural consistency; in six the enemata were followed by scybala; and in ten they were either returned or failed to act. In no instance were the enemata attended with unpleasant symptoms, either locally or constitutionally.

Creoline.

Dr. L. Lichtwitz, of Bordeaux, in a communication on creoline, in the *Bulletin Médical*, September 30, 1888, concludes that creoline is a disinfectant (deodorant) superior to other agents, and that whenever it obviates bad odors formed in the nasal or buccal cavities, or in the ears—from ozæna, ulcerated malignant tumors, fetid otorrhœa, etc.—it should be employed. It diminishes the pathological secretions from atrophic pharyngo-rhinitis, "fibrinous" rhinitis, and otorrhœa. It is a powerful antiseptic and easy of application; being non-toxic, it is preferable to other antiseptics.

[This estimate of the value of creoline as an antiseptic is probably hasty. Other experimenters have questioned its value, and have shown that it sometimes produces toxic effects similar to those caused by carbolic acid. It is clear that it should be used only with caution.—Editor of the REPORTER.]

Electric Prostration.

Several cases of this new malady are reported from Creusot, France. It affects workers under electric light. The light exceeds 100,000 candle power, and it appears that it is this excess of light, and not the heat, which produces the nervous symptoms. A painful sensation in the throat, face, and temples is first noticed, then the skin becomes coppery red, and irritation is felt about the eyes; much lachrymation ensues, and these symptoms then disappear, whilst the skin peels off in five days. The effects are comparable to those produced by walking over fresh snow in the sunlight, and may be regarded as a sort of "sun-burning."—*Lancet*, Oct. 27, 1888.

Differential Diagnosis of Twisted Pedicle.

An interesting discussion took place at the British Gynæcological Society recently, on the means of distinguishing between a twisted pedicle in ovarian cyst and rupture of an ectopic pregnancy. The diagnosis is one which few practitioners would care to attempt, but it is in reality fairly simple, though in this, as in other intra-abdominal affections, the surgeon is exposed to surprises on opening up the cavity. The collapse in rupture of extra-uterine gestation is sudden and complete, the tumor, if any has been perceived, has disappeared, to be replaced by symptoms of internal hemorrhage and hæmatocele, and the pain is sharp. In twisted pedicle, on the other hand, the symptoms come on slowly, and the abdominal tenderness is extreme. The tumor is tenser than ever. As pointed out by Dr. Heywood Smith, the pulse may afford some help in arriving at a diagnosis, the hemorrhage being limited to the cyst in the one case, but practically unlimited in the other. In extra-uterine pregnancy the symptoms rapidly run on to a fatal termination, unless relieved by abdominal section; whereas in the other, they may pass off in the course of a week, and the tumor become smaller. An important point in the diagnosis is evidently the presence of symptoms pointing to pregnancy, though their absence is not equally significant.—*Medical Press and Circular*, Oct. 31, 1888.

Acute Obstruction of the Bowels.

Dr. Coppens, Chief of the Surgical Clinic in the Lille Faculty of Medicine, has a paper on acute obstruction of the bowels and peritonitis from perforation, in the *Archives générales de Médecine*, October, 1888. He concludes that, of all varieties of false obstruction, peritonitis from perforation is the only one that it is possible to confound with acute obstruction of the bowels—an error which has been often committed. The diagnosis between the two affections is essential before treatment can be thought of. This diagnosis, he says, is possible. The most important differential points are drawn from an examination of the temperature, and of the degree and mode of appearance of the meteorism. Contrary to what has been maintained hitherto, he asserts that it is in peritonitis, and not in strangulation, that tympanites is met with most frequently and in the highest degree. If it is possible to distinguish acute intestinal obstruction from false, it is nearly always impossible, in the case of true obstruction, to determine its variety. But this, he says, is of no importance whatever from the point of view of treatment. He regards it as dangerous to resort to mild measures for too long a time. The abdominal incision, he says, should be median and large enough to ensure rapidity and ease in exploration.

Saccharine.

The *Lancet*, Oct. 27, 1888, says that the true position of saccharine is becoming somewhat hard to define. Its employment in the preparation of many substances liable to duty has already been prohibited, but this course of action was quite compatible with the possession of the most harmless properties. In a recent text-book on therapeutics, the author, when dealing with saccharine, appended the following disparaging foot-note: "The present is probably as good as any other place in the book to notice a substance whose use in practical medicine depends upon its lack of medicinal properties." Still, of late there have appeared several paragraphs in various journals referring to the report of a commission of Paris doctors, and their adverse verdict has already served to disquiet many diabetics, who had hitherto placed full confidence in saccharine. In the abbreviated form in which it has reached us, this report does not amount to very much. It starts with the assumption that saccharine is antiseptic; but this fact rests upon a very slender foundation—its power of retarding putrefactive changes in the urine eliminated during its employment. The main conclusions of the French commission are that it seriously troubles the digestive functions and increases dyspepsia, and should be prohibited as an article of food. These statements are not in accordance with those of very many previous observers, who have studied the action of saccharine, and found it to be mainly negative. Large quantities have been taken by men, and have been administered to animals, without causing any symptoms of any kind. The report merits attention, although it is so widely at variance with previous experience that it seems probable that some oversight has led to these conclusions.

For a succinct statement of the properties and uses of saccharine, our readers are referred to an Editorial in the REPORTER, June 23, 1888.

NEWS.

—Typhoid fever is reported to be epidemic in Brooklyn, New York.

—Dr. John H. Larrabee, the eldest son of Dr. J. A. Larrabee, died in Louisville, Nov. 17, 1888.

—The steamship Bolivia arrived at New York, Dec. 2, from Gibraltar, with smallpox on board.

—Naples is to have a new University building at an estimated cost of about 16,000,000 francs.

—The physicians of Lansing, Mich., are said to have combined to protect themselves from patients who do not pay.

—Typhoid fever is prevalent in Providence, Rhode Island. Seventy-five cases are said to have been reported.

—There was one case each of variola, varioloid, and scarlatina at the Municipal Hospital of this city during November.

—It is stated that the importation of saccharin and substances containing it has been forbidden in France and Algeria.

—Pleuro-pneumonia has developed among the cattle in Monroe County, New York. One hundred and fifty animals are said to have been killed.

—Dr. W. B. Boyd, of Bloomington, Illinois, committed suicide Nov. 30, by shooting himself. He is said to have been in poor health for some time.

—Dr. G. A. Slocomb is credited with having safely delivered a woman in Millbury, Mass., of four girl babies, all of whom are alive, though one is very delicate.

—Mr. Montagu Perceval states in a note to the *Lancet*, Nov. 17, 1888, that he has found antipyrin in two-grain doses every hour very useful in laryngismus stridulus.

—Two new cases of yellow fever were reported in Jacksonville, Fla., Dec. 2, but no deaths. The total number of cases up to that time was 4669; total number of deaths 410.

—Dr. J. Cheston Morris appeared before the Finance Committee of Councils of this city, Dec. 3, to advocate the appropriation for a milk inspector, to act under the supervision of the Board of Health.

—A woman living in Burlington, N. J., made a mistake in taking a dose of medicine recently, which nearly cost her her life. She desired to take some cough mixture, but, instead, picked up a bottle and took a teaspoonful of tincture of iodine.

HUMOR.

"I AM ON MY WAY HOME, Doctor," said a citizen who was after some free advice, "and I'm tired and worn out. What ought I to take?" "Take a cab," replied the intelligent physician.—*Worcester Gazette.*

CITIZEN: "What are you doing with that man?" Policeman: "I have just arrested him." Citizen: "But he's as deaf as a post." Policeman: "He'll get his hearing before the magistrate."—*Harper's Bazar.*

DISCHARGED FOR CAUSE.—"Why did you leave your last place?" "Sure I worr discharged for doin' well, mum." "Discharged for doing well? Why, where were you?" "I worr in the harspital, mum."—*Harper's Bazar.*

YOUNG DOCTOR (to hospital superintendent)—"I want no interference, sir, with my directions. I know my business. I have walked all the hospitals of London and Paris." Superintendent—"You may have walked foreign hospitals, sir; but you'll find that I run this one."

OLD LADY—"You seem to have a cold, sir." Stranger—"Yes, madam." Old Lady—"Well, I tell you what to do. Jes' go home and put your feet in a tub o' hot mustard-water an'—" Stranger (gruffly)—"That's fine advice to give a man with a cork leg; now, ain't it?"

METEOROLOGICAL ITEM.—Miss Bunker Hill—"Do you have much Indian summer in Colorado?" Major Wester—"Yes, we have a great deal more Indian summer than you do here in the East." "I wonder why that is so?" "Because we have got more Indians, I reckon."—*Texas Siftings.*

WASTEFUL.—"But what an awful lot o' money those high-toned travelers waste for drink," said Uncle Abner, as he laid down his newspaper. "A man who'll pay a hundred dollars for a saloon passage to England when he can get it in the steerage for twenty is a slave to rum—that's what I say!"—*Life.*

THERE HAD BEEN A RUNAWAY; a pair of horses were down, a carriage smashed to pieces, and the driver and a lady lay groaning on the grass with their hurts. The street-car stopped and many got off to render aid. Among those who stood on the rear platform were two ladies, one of whom held up her hands and exclaimed: "Mercy on me! but what an awful, awful affair! How long did you say you boiled your grape jelly, Mrs. Smith?"

THE

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COMMUNICATIONS.

THE SURGICAL IMPORTANCE OF STRICTURES OF LARGE CALIBRE.[1]

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There is no necessity at the present day for an argument in favor of the existence of the slight contractions of the urethral canal known as strictures of large calibre. The work of Dr. Otis in this country, Mr. Teevan in England, MM. Guyon, Terrillon and others in France has shown conclusively that such contractions may be of considerable importance; and the general phenomena associated with them now constitute a group familiar to every genito-urinary specialist. The patient will present himself with the following symptoms, often so slight that he is inclined to apologize for seeking professional advice, and sometimes elicited only by careful questioning. He will have noticed that in the mornings the lips of the meatus urinarius are glued together, and that on separating them a drop of whitish, opalescent fluid makes its appearance. Micturition will be found to be slightly more frequent than usual, and the patient will particularly describe a slight haste and urgency to begin the act, which in its actual performance is a little slow and somewhat imperfect. At the end of urination, unless he pays especial attention to shaking and stripping the penis, there will be a dribbling of a certain amount of urine, varying from a few drops to a drachm or two. He will often complain of a dull aching sensation in the lumbar region and of a similar feeling in the hypogastrium, or occasionally of a neuralgic pain in one or both testicles. I have elsewhere explained[1] what seems to me the *rationale* of the development of these symptoms, and I reproduce a portion of that explanation here as a fitting introduction to a few cases which I desire to place on record.

To account for the symptoms above mentioned, and for their cause, there are certain general physical and physiological laws which should be recalled. Persistent irritation, such as that which results from frequent or protracted attacks of gonorrhœa, causes at any given point in the body an increase in the fibrous tissue of that region, and the deposit or development of new tissue of a similar character. This is especially true of mucous and submucous surfaces, and still more particularly of the urethra, which, by its anatomical peculiarities, offers peculiar facilities for the production and organization of inflammatory products. Such a deposit, occurring in the submucous structures around the urethra, interferes to a greater or less extent with the lumen of that canal and thus constitutes a stricture. Once deposited, here as elsewhere throughout the body, this new tissue tends to contract more or less steadily and continuously. This is in consonance with a well-known pathological law; and the contraction is no more noticeable here than

[1] A translation of this article is published in the current (November) number of the *Annales des Maladies des Organes Génito-Urinaires*, edited by M. Felix Guyon.

[1] *International Encyclopædia of Surgery*, Vol. II.

when it occurs in the intertubular spaces in interstitial nephritis, strangulates and destroys the parenchyma of the liver in cirrhosis, produces induration and bronchiectasis in chronic pneumonia, limits the movements of inflamed joints, distorts or deforms after burns and scalds, or in any of the many possible directions exerts its power in the production of disease. We have, then, it must be admitted, in urethritis, a sufficient cause for the production of a condition which tends gradually to diminish the size of the urethra and to interfere with its dilatability.

In studying the effect of this condition in producing the symptoms that have been detailed, certain other physiological laws must be taken into account. Habit is a powerful agent in facilitating and controlling the functions of animal life. Illustrations of this fact in other systems than the genito-urinary are frequent and familiar. But to take up the case in question, it is safe to say that in a healthy adult, a certain equilibrium has been established and maintained between the usual efforts and powers of the bladder as an expulsive organ, and a certain average amount of resistance which must be overcome before it can empty itself. At the age of twenty-one years, this adjustment of force depends upon a large number of previous distinct acts of micturition. This balance between the force of expulsion and its work cannot with impunity be disturbed, and even a slight interference with the calibre of the urethra tends to produce such disturbance.

Apart from the proclivity to muscular spasm in the neighborhood of and behind every stricture, this interference with the action of the bladder arises from the encroachment of the new deposit upon the urethral calibre. It is a law of hydrostatics that, if a current of liquid be passed along a tube, a certain degree of friction proportionate to the amount and velocity of the current and the size of the tube takes place between the walls of the latter and the liquid; if the tube be narrowed at any one place, the friction is increased at that point, and, to avoid a diminution in velocity, the propulsive force behind the liquid must also be correspondingly increased.

Still another point must be mentioned before I turn to the group of symptoms, the occurrence of which after so many cases of gonorrhoea I shall endeavor to explain. The act of micturition is one requiring for its perfectly normal performance: first, the relaxation of certain muscles to secure patency of the urinary channel; and, next, the thorough and complete contraction of those muscles to produce entire evacuation of the contents of the passage. The latter portion of this act is accomplished by the contraction of the circular muscular fibres which surround the urethra, and which, in a healthy condition, serve to bring and retain its walls in close apposition during the intervals of urination. The submucous deposit which increases the friction of the stream of urine at any point, also interferes with the accurate closure of the canal by those muscles whose action is impeded, and whose structure itself is in part often invaded, and as a consequence we have imperfect emptying of the urethra at the end of urination. Finally, if in addition we recall the intimate nervous connection of the urethra with all the viscera of the abdomen and pelvis, and with the walls of those cavities, and the reciprocal relations that exist between them, we are in a position to sum up the relation of the pathological and subjective phenomena as follows:

The increased friction and resistance resulting from even a slight fibrous periurethral deposit disturb the normal relations of the bladder, and, by rendering it irritable, bring on one of the common symptoms of stricture, frequent micturition. The imperfect closure of the tube, the muscular action of which at the point of deposit is materially interfered with, causes the equally imperfect expulsion of the last drops of urine, and produces another characteristic symptom—dribbling at the end of micturition. The retention and decomposition of these last drops, together with the abnormal friction between the stream of urine and the urethral walls, gives rise to a subacute inflammation of the mucous membrane, accompanied with a catarrhal or muco-purulent discharge, constituting the condition of gleet; while pains in remote organs and situations, notably in the lumbar and hypogastric regions, are developed by reflex irritation transmitted from the area of inflammation.

This relation of causes and effects has been in the main accepted as correct by the profession for many years. Probably no one denies that in certain strictures in which the urethral calibre is markedly diminished, the connection between the pathological changes and the observed indications is about as has been stated. The differences of opinion which now exist are chiefly as to the amount of urethral contraction which is sufficient to produce noticeable effects.

That every urethral coarctation following on urethritis must at some time have been a stricture of large calibre, is self-evident, but just when such a stricture becomes an active pathological factor, and is able in the manner indicated to give rise to symptoms, is an unsettled point. Indeed, it is not probable that it ever can be definitely determined. The idea that any particular fixed calibre represents the normal condition of the urethra has long ago been abandoned, the observed variations of that canal being such that no special dimensions can be assigned to it as representing the precise dividing line between health and disease. The old method of regarding the size of the meatus as an indication of the normal calibre of the canal behind it, is also unquestionably fallacious, it having been conclusively shown that no more definite relation exists between them than between any other mucous canal and its corresponding outlet—the mouth and the œsophagus, for example, or the anus and the sigmoid flexure. That there is a certain correspondence between the size of the urethra and that of the flaccid penis, is true, the calibre of the one increasing with the circumference of the other, but that this ratio is present in any absolutely unvarying manner, has not yet been demonstrated. At the most, the size of the penis may be said to furnish a general indication of the urethral dimensions, but one which is approximate merely. On the other hand, it has been shown that there are usually certain normal variations even in the spongy portion, which is now claimed with much show of truth as the most common seat of pathological contractions, and that it is impossible with any of the means at our command to distinguish between these natural irregularities and coarctations of equal calibre due to incipient stricture.

An illustration of what I refer to is found in the following case: A muscular and apparently robust man, aged about 55 years, was admitted to my wards in the Philadelphia Hospital, suffering from a leg-ulcer. No urinary trouble was suspected until he was subjected to an examination for the purpose of verifying a theory to which I shall presently allude. He was then found to have a coarctation at the distance of four and a half inches from the meatus. There were no marked subjective symptoms whatever: micturition was possibly a little too frequent, and was not quite complete, a slight dribbling following the flow of urine; there were obscure lumbar and hypogastric pains, and occasional neuralgia of the glans penis; but these facts were only elicited after careful questioning. A No. 28 steel sound passed into the bladder without the slightest perceptible difficulty, but the patient complained of pain extending from the peno-scrotal junction to the perineum. An examination with a bulbous bougie, No. 24, revealed a stricture situated in the spongy portion of the urethra at the point mentioned, about four and a half inches from the meatus; No. 26 bulbous could be passed only with great trouble.

Dilatation was commenced, but an attack of some intercurrent disease—pneumonia, I believe—caused the patient to be transferred by one of my internes to the medical ward, where he soon after died. At the autopsy I carefully removed the genito-urinary organs, on the appearance of which I have the following notes: The penis was of average size, the pendulous portion measuring about four and three-quarters inches in length, and a little over three inches in circumference. (This would have fixed the normal calibre of the urethra, according to Dr. Otis's standard, at about thirty-one millimetres.) Upon dividing it along the dorsum a band of fibrous structure was seen almost encircling the urethra four and a half inches from the meatus; extending from a point a little anterior to this back to the bulb of the corpus spongiosum and to the crura of the corpora cavernosa was an area of intense congestion, which persisted even after maceration of the specimen in chloral solution for two weeks, and was then plainly noticeable across the room at a class demonstration; the bladder was dilated and hypertrophied and the ureters slightly dilated; the kidneys were healthy; there was no enlargement of the prostate. Two small patches of ulceration existed on the floor of the membranous urethra, each measuring about two lines in diameter. A microscopical examination of the constricting band was made by Dr. Shakspeare, Pathologist to the Philadelphia Hospital, with the following result: "The section which I made of the stricture submitted for examination by Dr. White included the mucous and submucous tissue. Longitudinal sections were made after the specimen had been hardened in alcohol. These, after staining in carmine and mounting in dammar, exhibited under the microscope a great increase of the fibrous portions of the submucous tissue. Among the fibrous bundles were numerous typical, curly, elastic fibres.

"It was also noticeable that the walls of the capillary vessels running toward the

mucous surface were very thick and fibrous (sclerosed). The inflammatory processes were in the last stages, as was evidenced by the sparseness of cellular elements scattered throughout the fibrous portion."

This case is, in my opinion, one of a large class formerly often overlooked, and still neglected or misunderstood by those practitioners who adhere to the old methods of examination.

As lately as 1875 Sir Henry Thompson said: "When a young man consults you for certain troubles relative to which you desire to learn whether urethral obstruction be a cause or not, do not be tempted for an instant to adopt so unnecessary a course as the introduction of very large instruments or instruments with huge bulbs at the end of them; but simply take a flexible English gum-elastic bougie well curved toward the point, with a blunt end not larger as a rule than number ten or eleven of our scale, and pass it very gently and slowly into the bladder. If it goes easily—above all, if it is withdrawn without being held and slides out with perfect facility—take my word for it he has no stricture, and, *quoad* obstruction wants no use of instruments whatever." He says elsewhere, however: "With the bulbous bougies (various sizes) you may determine the existence of any narrowing in any part of the urethra with great accuracy, and for many years I have never operated without employing them carefully beforehand." I infer from the context of his lectures on the urinary organs, that he refers in this last remark rather to the locating of strictures already discovered than to their original detection. The value of the *bougie à boule* in the diagnosis of strictures is now so universally recognized that no argument in its favor seems necessary, but I desire *en passant* to call attention to one source of error which is associated with their use in the deep urethra and which is not infrequently overlooked. Years ago I published (The *Philadelphia Medical Times*, May 26, 1877) a paper giving the results of some investigations into the relation between onanism and urethral stricture, which led me to examine a large number of persons with healthy urethræ. In these examinations I found that without exception at a distance varying from 5½ to 7½ inches from the meatus the *bougie à boule* was arrested during its withdrawal from the bladder, and that the obstacle which was there encountered gave to the hand of the surgeon the characteristic sensation so familiar to those who have used this instrument in cases of stricture. It was evident that this condition could not be an abnormal one and its explanation was sought and I believe found in the anatomy of the curved portion of the urethra.

Any extended consideration of this would be inconsistent with the limits and purpose of this paper; but there are one or two points which seem to me worthy of special mention. Directly beneath the symphysis pubis the urethra perforates the posterior or visceral layer of the deep perineal fascia. A little in advance of this point is the anterior layer of the same fascia, continued round the under surface of the urethra, becoming lost upon the bulb and filling in the sub-pubic arch from in front. Between these two layers, which are often described as the triangular ligament, are found various vascular structures, important muscles, Cowper's glands, and the membranous urethra. It is said that the anterior layer exerts the larger share in stopping the progress of an instrument inward, owing to the fact that just in front of it is the freely movable and dilatable bulbous portion of the urethra, permitting considerable motion in the point of the sound, which is suddenly arrested at the commencement of the membranous urethra by this firm fibrous anterior layer. This is probably true; but it is capable of demonstration that the posterior layer, for analogous reasons, offers a similar opposition to the free withdrawal of a bulbous bougie. The prostatic urethra being at once more movable and more dilatable than the membranous portion, the bulb slips smoothly along it until the point is reached at which this layer of fascia closely embraces the posterior part of the membranous urethra and the outer surface of the prostate.

Here for obvious reasons it is arrested, and it is at this moment that the deceptive sensation which may be considered indicative of the existence of organic stricture is communicated to the hand.

A series of observations and dissections upon the cadaver confirmed me in this view, which was originally purely theoretical, and moreover eliminated the possibility of the resistance being due to a spasm of the compressor urethræ muscle which surrounds the canal at this point, arrest of the instrument occurring just as invariably after death as before.

The possible progress of the case described above, to which we may now return, had it not been interrupted by acute disease and death, can be easily stated. In consequence

of the imperfect emptying of the urinary tract, cystitis would sooner or later have resulted, and would probably have been regarded as the primary disease if the urethral coarctation had remained unrecognized. Pyelitis, or infiltration of urine, or both, would have followed, and would possibly have caused death by uræmic or pyæmic poisoning. It is of course admitted that the case is in many ways an unusual one. With the same amount of existing disease the subjective symptoms would ordinarily be much more marked, or the contraction giving rise to it would be of smaller calibre: actual ulceration is rare in these conditions, and an involvement of the urinary tract posterior to the bladder was hardly to be expected where there was so little obstacle to the stream of urine. The dilatation of the ureters in this case was probably due to the increased frequency of urination and the periodical obstruction thereby produced in the flow of urine into the bladder; at least, that seems to me a possible explanation. The facts remain, however, that the conditions which were found were simply exaggerations of the pathological processes which beyond a doubt result from any infringement upon the normal calibre of the urethra. I may select a few cases from my private practice to illustrate the same point.

Case I.—A man 30 years of age, a hotel-keeper in a neighboring city, applied to me some months ago on account of a troublesome gleet which had persisted for several years. It was of the most trifling character, came from the deep urethra, and was associated with the symptoms mentioned above: frequency of urination, dribbling, and slight hypogastric pain. He had, before coming to me, tried various methods of treatment, among them the use of steel sounds of a calibre of 26 and 28, which were as large as his meatus would admit and really seemed to distend the whole urethral canal. Thinking that the course had been insufficient in duration I recommended persistence in that method of treatment, ordering a 29 instrument which caused considerable pain at the end of the penis. He used this, with and without various injections and different methods of internal treatment, with no effect whatever. He became much discouraged and finally agreed to allow me to enlarge the meatus, a procedure which I had originally recommended but had not urged, as he was excessively nervous and as the aperture was of more than the average size. After doing this I ordered a No. 30 steel sound, intending gradually to increase the size of the instrument, but from the first week during which that size was employed his symptoms absolutely disappeared and he has never had any return.

I am of course aware that the result in this case may be attributed to the enlargement of the meatus. Ever since Mr. Furneaux Jordan called attention to the possible results of a congenitally small urinary meatus in males and females and recorded cases of urethritis, prostatitis, cystitis, and epididymitis due to this cause, it has been recognized as an occasional source of this and other genito-urinary diseases. Suprapubic pain, frequent micturition, lumbar pain, hæmaturia, preternatural sexual excitability are all in my own experience distinctly referable to contraction of the meatus and I must therefore admit that in the above case the enlargement of that opening may have been the active factor in producing a cure. As it would have naturally received a No. 28 sound with ease and a No. 29 with the use of a little force, it seems hardly likely however that its incision had much to do with the subsequent result.

Case II.—A gentleman aged 45 years, a widower, came to me on account of sexual disability characterized by imperfect erections and premature ejaculations. He had never had any venereal disease and had been happily married for many years, having a large family of healthy children. After the death of his wife there was a prolonged period of continence, at the end of which, under the influence of urgent sexual desire, he attempted intercourse on several occasions with entire want of success. He had been carefully and intelligently treated by his family physician, a man of large experience, and had used, as there was hyperæsthesia of the deep urethra, a steel sound No. 30, which he had introduced for himself twice a week for a period of some months. In addition to this, much judicious treatment had been employed. A physical examination gave absolutely negative results. The therapeutics of his case had been so comprehensive that I scarcely knew what to recommend, but, pending an examination of his urine, directed him to get a No. 31 sound and to insert it at the usual intervals, intending gradually to increase the size if the urethra would permit it. He disappeared for a few weeks from my office, at the end of which time he returned to report that he considered himself entirely cured, having for the first time for years had sexual connection. His cure has proved to be permanent.

Case III.—A gentleman aged 48 years, but remarkably youthful and vigorous for his age, came to me recently in great distress, giving the following history: He had been the subject of one or two gonorrhœal attacks early in life and had subsequently had a slight urethral contraction, for which he had been treated by gradual dilatation. He had been accustomed all his life to having regular and frequent sexual intercourse, but about a year previous to his visit to me had become engaged to a young and attractive woman for whom he had great respect, and had for that period been entirely continent. A month ago he told me he had been married, and to his dismay and mortification found that he was unable to perform the sexual act, erections being imperfect or fleeting, and ejaculation occurring prematurely. He had used his steel sound No. 28 without apparent benefit. No stricture or other abnormal condition of any kind was discoverable by the most careful examination, and, considering his years, he was apparently a model of physical health. I recommended the preliminary use of a No. 30, which went in with slight difficulty, and gave a cautious prognosis to prepare him for a somewhat extended course of treatment. To his and my own surprise and gratification, however, after a week or ten days the only distinct subjective symptom which he had had, a neuralgic pain in the right testicle, disappeared and shortly after he without difficulty established natural sexual relations with his wife.

Case IV.—A gentleman aged 30 years, a merchant of large interests whose business required constant visits to a neighboring city, applied to me for treatment for a condition of irritability which gave him great annoyance. He found that he was unable to retain his urine for more than two or three hours at the most, and on starting from his office for the water-closet, or more particularly on arising from his seat in a parlor-car to go to the urinal at the end of the car to empty his bladder, he would find great difficulty in controlling the desire, the urine sometimes escaping before he had time to unbutton his clothes. He had no other marked symptoms, but had been carefully examined by different practitioners for vesical calculus, stricture, prostatic disease, etc. His urine showed nothing abnormal. He had been instructed in the use of the steel sound and was then employing a No. 30, which certainly seemed to be a full size. I repeated the examination which had been made by my predecessors and found nothing to account for his trouble. As his visit to me came shortly after my experience with one of the cases recorded above, I advised him to get a No. 31 steel sound, although he felt quite sure that he would not be able to pass it, the 30 distending the urethra so completely. I thought it was worth the trial, however, although I was disposed to consider his case an example of the urethral erethism so frequently seen in railroad employés and to a less degree in commercial travelers, and resulting doubtless from spinal congestion consecutive to the continual jarring experienced in railroad journeyings. While I was yet undecided as to what further treatment I would recommend, he returned to report the almost complete disappearance of his symptoms following the first week's employment of the larger-sized instrument.

I have seen a number of similar but less striking examples of the same general truth, which it seems to me may fairly be expressed as follows: A difference in the size of urethral instruments employed for dilatation, so slight as to seem trifling and unimportant, may result in exceptional instances in a therapeutical effect far beyond what would be ordinarily anticipated; the practical conclusion from which is that, other means having failed or definite indications for other treatment being absent, we should never stop short of *full* dilatation in disturbances of the genito-urinary functions, the treatment being harmless in itself and sometimes so unexpectedly beneficial. While there is nothing new about these observations, it has yet seemed to me that even with genito-urinary specialists who are thoroughly familiar with the modern views in regard to strictures of large calibre, and certainly with general surgeons who do not always accept these views as a guide in practice, treatment is often defective on account of a failure to recognize that a slight difference, even that of one millimetre, in the circumference of the dilating instrument, may sometimes make considerable difference in the results obtained.

—Dr. Nathan R. Gorter, who accompanied Mr. Robert Garrett in his trip around the world, has sued him for $30,000 for professional services rendered.

—The effects of the "Scotch Oats Essence" Company, in New York, were sold out Dec. 7, by the Sheriff. Sixty-three gross of "Scotch Oats Essence" realized about four cents a bottle, the retail price being one dollar a bottle.

OPERATIVE PROCEDURE IN TRAUMATIC EPILEPSY.[1]

BY J. T. WILSON, M.D.,
SHERMAN, TEXAS.

Reflex epilepsy from traumatic injuries of the brain is not a rare trouble, and nearly every surgeon meets with one or more cases during his professional life. I believe it to be proportionately the most curable of epilepsies. It is a very important affection, and requires more study from the general practitioner than is usually given it. A great mistake is too frequently made by either not operating at all, or by waiting too long. In truth the tendency in these cases is too frequently to neglect them or prescribe only a palliative treatment. In this day of rapid surgical advance, when the hitherto sacred precincts of the cranium can be invaded with so much less hesitation than in former years, and with such comparative safety since the introduction of antiseptics, and with the brilliant record of brain surgery before us, where tumors and other pathological lesions are diagnosticated and removed with such splendid results as to astonish the world, no case of epilepsy caused by a depressed fracture should be permitted to progress without giving the unfortunate and wretched victim an opportunity to receive the benefits an operation might bring. Trephining does not aggravate the convulsions, and even if no benefit should result it does not leave the patient in a worse condition, when he has been properly prepared for the operation and it is carefully done under strict modern rules. Though hemiplegia exist, and its liability to remain is taught by the English surgeons, this should not deter us from operating and curing the fits if possible.

In my limited experience with this disease, I have found the convulsions in a majority of the cases extremely severe, sometimes quite frequent, and usually to a great extent one-sided: that is, the muscles of one side were nearly all involved in the spasm, though not in the same degree, and the muscles of the face and upper extremity of that side were in most cases more affected than those of the trunk and lower extremity. Antispasmodics generally have less control over them than over the attacks from other causes, and their controlling influence does not last so long. In a majority of the cases that I have seen, the general health was fairly good, the patients had morbid appetites and ate ravenously large quantities of food; and in all the cases coming under my observation, to the best of my recollection, the frontal, temporal and anterior region of the parietal bones sustained the injuries. General treatment, attention to the general health with tonics, antispasmodics and more especially the bromides would always lessen the severity, and to some extent the frequency, of the attacks for awhile; but the bromides largely given for any considerable length of time seemed to have a deleterious effect upon the health of this class of cases and also seemed to have a more unfavorable influence upon the mental state, inducing early dementia.

Persons predisposed to epilepsy, or who are very nervous and excitable, or very susceptible to nervous shocks, are more liable to epilepsy from fracture or other injuries of the skull and scalp than those who are differently constituted. In one patient a slight depression will produce it, in another a deep one will not, though both occur in the same locality; and in these nervous cases an operation is especially likely to do good; but in all it is of paramount importance to do the operation thoroughly.

In this connection I will report two cases, illustrative of the object I have in view, which taught me an important lesson in regard to operating upon the skull and brain for epilepsy caused by an injury; and the lessons there learned served me a useful purpose in other cases.

Case I.—J. H. O., American, male, æt. 40, married, occupation farmer. No reliable family history could be obtained except that he had always been very nervous and excitable. General health fair, though the patient was not robust, and was of very nervous temperament. He was affected with chronic melancholia, and had attempted suicide by cutting through his skull with the sharp corner of an axe, the wound being through the coronal suture, involving the frontal and parietal bones, about half an inch above the temporal bone of the right side. Not succeeding by this means, he made another attempt a few days later by driving a "number six" nail through the opening in the skull made with the axe. This nail was driven for more than an inch into the cerebral tissue. A physician saw him soon after and extracted it, dressing the wound in the ordinary, old-fashioned way. Some suppuration supervened, and the wound closed by granulation. Paralysis

[1] Read at the meeting of the Southern Surgical and Gynecological Association, Birmingham, Ala., Dec., 1888.

of left side gradually came on, and in six weeks was almost complete. A few weeks after the closure of the wound the patient was attacked with epileptic convulsions, and they recurred at intervals of from one to three weeks for several months. As time passed they grew more frequent and severe. Bromides in full doses seemed for awhile to lessen the severity but not the frequency of the attacks, and finally seemed to lose all effect over them; while after the use of them for several months the patient's digestion began to suffer, and symptoms of beginning dementia were strongly marked. Strange to say, the paralysis slowly improved sufficiently to enable him to walk about with the assistance of a cane. At the end of nine months from the reception of the injury the administration of bromides was discontinued, and the patient was put upon a tonic regimen for about two weeks. At the end of this time he was anæsthetized, the scalp was shaved, and a crucial incision was made over the old cicatrix. As the scalp was dissected up and drawn back, a small oblong depression of the skull was found, and in its centre a small opening leading down to the dura mater, the bone having sloughed away. The trephine was applied and two buttons of bone were removed, embracing the entire length of the depression. A thick cicatrix of the dura mater was observed; but as it looked healthy, and as the epilepsy was thought to be caused by the depressed bone, the cicatricial tissue was not interfered with, and after all the depressed bone had been removed the wound was closed by the ordinary method. It healed readily under cold water dressings. The patient now improved rapidly, and for three months had no convulsion. His general health improved, and the paralysis improved so much that he could walk comparatively well with the assistance of a cane, and go wherever he desired. His mental condition also mended considerably, and the man was more cheerful than he had been for months, so that it was thought that his recovery would in a short time be complete.

After the lapse of three months, however, he began to get somewhat nervous and morose; his appetite decreased and his paralysis increased. His melancholia began to be markedly observed. He was now restless, though not inclined to walk much, was troubled with insomnia and at times complained of quite severe pain in his head. A marked change in his general condition was easily observed. This change came on rapidly; and one morning after waking from sleep he was attacked with a very severe convulsion which lasted nearly two hours, and from which he never rallied, but sank and died in three or four hours. The autopsy revealed a very much contracted calibre of the trephine wound, it having filled up with new tissue. The old cicatrix of the membranes was hard and firm, bulging a little and adherent to the skull around the wound. When it was incised, an abscess of the brain was revealed, in which was found a small spiculum of bone about half an inch in length. The brain tissue was softened and slightly discolored for perhaps a sixth of an inch around, extending into the cerebral tissue from the abscess cavity.

If when this patient was trephined the cicatrix in the membrane had been cut away, the part explored, the piece of bone removed and the diseased brain scraped away, it is highly probable that his epilepsy and perhaps his paralysis might have been cured and his life prolonged.

Case II.—T. M.; American; male; æt. 24; farmer; fell from a tree a distance of over twenty feet, striking his head upon a hard substance and sustaining a fracture of the skull involving the frontal bone of the left side near its junction with the parietal. According to the history obtained, he was said to have remained insensible for several hours and to have been confined to his bed for nearly three weeks. He gradually recovered, and in the fifth week after the accident, and after a day's labor of unusual severity, was attacked with epilepsy followed by another seizure the next day. Another occurred after an interval of two weeks, and similar seizures recurred at irregular intervals for fifteen months, the attacks growing more frequent and severe. Any unusual mental or physical exertion brought them on. Very little benefit was obtained from internal treatment; his digestion was much disturbed by large doses of bromides; he had a morbid appetite; his intellect was dulled, and his case presented a gloomy prospect.

After about ten days' preparation he was trephined, two buttons of bone were removed, and a small piece of the internal table lying loose was taken away. The wound was closed, and it healed without trouble. He was confined to his bed for ten days, and in fifteen days after the operation left his room. He seemed to be doing well until twenty-one days after the operation, when he had a mild epileptic attack, and these

attacks were repeated with variable frequency and severity for four months, when it was determined again to resort to operative procedure. A V-shaped incision was made; the flap was turned back, and two buttons of bone were removed from the sides of the old wound. A tense cicatrix of the dura mater was discovered, and it was carefully removed entire. The brain beneath presented no perceptible pathological lesion. The wound was washed with warm carbolized water, the scalp was dissected up for nearly an inch around the wound, and the edges were brought together with silk suture and closed up. The patient recovered without an untoward symptom. He had five or six mild spasms in the following three months, when they ceased altogether, and after five years—when heard from a few months ago—he had had no further trouble, but remained well and able to cultivate his farm.

These operations were not done under strict antiseptic rules, as the practice had not come into such general use as at the present day; but in the second case warm carbolized water was used.

This experience taught me that in all cases of trephining, when the bone is removed, the part of the brain and membranes exposed should be carefully examined, and that if a cicatrix exists it should be removed, as also that any foreign substance or pathological lesion of the brain should be cut or scraped away under thorough antiseptic precautions. If hemorrhage occurs, and continues after washing with hot water, the cavity can be very carefully and lightly packed with antiseptic wool, care being taken that the packing be not too tight, as the pressure thus made might result in mischief; and as soon as the hemorrhage has been controlled the packing should be removed.

It is not the pressure of the bone in every instance that causes the reflex disturbance; for the brain will sometimes become accustomed to this pressure if not too great, and its function may go on as before, after recovering from the shock of the accident. But if the membranes should have been lacerated at the time or sustained some other injury, followed by a circumscribed meningitis, a cicatrix will form, possibly adhesions and some contraction will take place; the cortical substance will be irritated, and from this cause convulsions are liable to ensue. Or, circumscribed inflammation may extend to the brain, and an abscess result; or a spiculum of bone may be driven into the cerebrum, and its presence may excite the disease. Therefore these sources of irritation should always be looked for and, if found, removed. Mr. Victor Horsley thinks that after a button is removed, if it is noticed that the dura mater bulges through the opening, it is an indication of the existence of pathological intercranial tension.

I believe that, in all cases of epilepsy caused by depression from an accident, a contracted cicatrix of the scalp, or a sensitive spot in the head (as in a case that came under my observation some years ago, in which pressure upon a sensitive spot would produce convulsions), trephining is not only justifiable but is demanded, and should be done without hesitation. If the bone is thickened, Prof. Briggs's teaching[1] is correct: remove it; trephine a second and a third time if need be, taking away all the diseased bone; or, even though it be not diseased, if there is much unnatural thickness, remove it, and if any pathological condition of the membranes or of the cerebrum be found, it should without hesitation be carefully cut away, leaving only healthy tissue, especially as regards the cortical substance; and no tense thick cicatrix of the membranes should be allowed to remain. Even thick, sensitive cicatrices of the scalp should, in my opinion, be removed, if there be the slightest suspicion that the epilepsy is caused by the traumatism.

After these operations the healing is materially assisted and subsequent danger is lessened by dissecting up the scalp for a few lines around the wound in the skull before it is brought together, in order not to have too much tension by cicatricial contraction. The wound should be carefully dressed according to the antiseptic method, and watched, every source of supposed irritation being removed; and if possible it should be made to heal by first intention, in order to prevent the formation of an extensive scar. The general health of the patient should be looked after; his excretive functions should be kept active and his nervous system tranquilized. The patient should be kept quiet and cheerful, away from all sources of excitement and from everything that would in any way affect his general health, for several weeks after recovery seems complete. In my judgment, success depends very much upon careful and judicious after-treatment.

In long-standing cases improvement in the convulsions does not always begin at

[1] *International Encyclopædia of Surgery.*

once; sometimes several months elapse before the improvement is marked and the habit gradually broken up; for there is a good deal in the habit the brain sometimes gets into with regard to these convulsions. Many neurologists now think that "idiopathic epilepsy has its origin in the cortex of the cerebrum, and from a surgical standpoint it is therefore not difficult to understand that any chronic endo-cranial lesion which affects this part of the brain can produce epilepsy." Dr. Senn,[1] of Milwaukee, in his investigations recognizes as causes of reflex epilepsy affections or wounds of the peripheral nerves, which indirectly affect the cortex of the brain, as well as lesions of the cortex itself.

It sometimes occurs that in trephining the skull for injuries or disease the surgeon is not careful enough in his exploration of the wound, and fails to remove splinters of bone or any other foreign substance which is liable to cause an inflammatory condition, and may produce epilepsy among other troubles.

Is it too much to hope that surgery may yet come to the aid of many epileptics who are otherwise considered incurable and doomed to a life of untold misery, whether their trouble is of traumatic origin or not?

EPITHELIAL CANCER OF THE THROAT AND NOSE; RECOVERY.

BY E. W. EDWARDS, M.D.,
CHICAGO, ILL.

About the first of May, 1887, I was consulted by Charles H. Crane, aged fifty-two years, a native of New York, married, the father of two children, one boy and one girl. The boy is compelled to live in Colorado to escape consumption, with which he is strongly threatened. The girl, about fifteen years old, is healthy. Mr. C.'s early years were spent on his father's farm as an assistant. At nineteen he commenced life for himself and settled in Illinois. He was robust but subject to autumnal attacks of bilious intermittent fever which was endemic in this State at that time. He was also subject to rheumatic troubles from which he suffered severely at times; but still he enjoyed good general health when free from these two maladies. He has for years been connected with the In-freight Department of the Pittsburg, Fort Wayne & Chicago R. R. in this city.

An examination of his case showed that he was suffering from epithelial cancer of the throat and nose. At the extremity of the nose there was pendent an excrescent morbid growth about three-fourths of an inch long, which resembled a rusty strawberry, and was more connected with the left ala. The nose was discolored above the junction of the cartilage of the septum with the nasal bones; the whole nose was swollen and congested, the capillaries and superficial blood-vessels being visible to the naked eye.

The face was swollen above the point of discoloration and was of a putty color and œdematous, showing upon pressure the characteristic dropsical infiltration. The nasal mucous membrane was diseased to the posterior nares and as far down as the œsophagus. The pharynx was highly ulcerated, and thickened to such an extent as seriously to interfere with deglutition, to the exclusion of all solid food. The liquid food had to be concentrated so as to increase the nourishing qualities in order to sustain life, until the improvement in the condition of his throat enabled him to take solid food.

My first effort was to get rid of the warty excrescence of the nose. To this end I applied a saturated solution of chloride of zinc, in a circumscribed ring at the base of the wart, as near as possible to where I thought the healthy nose should be. Then I painted the excrescence with liquor ferri sub-sulph. The nostrils were treated with a five per cent. solution of carbolic acid, with a wire probang armed with the finest commercial cotton. This was used because absorbent cotton becomes too rough and harsh when saturated with any of the remedies used in the treatment of cases of this nature, and especially when the probang is armed with the brush of cotton and has to be passed down through the nasal passages to the posterior nares. Then a whale-bone probang, suitably curved and armed, was passed up behind the velum, sweeping every part of the mucous membrane in the region of the posterior nares and the upper part of the pharynx. The cotton wrapping was then removed from the probang and a new covering of cotton was put on, saturated with the iron-solution and applied to the part as before. A new brush must be used for every application and saturated with the solution of iron, or a solution of chromic acid—thirty grains to the ounce of distilled

[1] *Annual Universal Medical Sciences*, Vol. II, 1888.

water; thus alternating with chromic acid and iron twice a day. I always preceded the other treatment with the solution of carbolic acid, for two reasons: first, to cleanse and disinfect; and second, to produce a local anæsthetic effect which should mitigate the harshness of the other treatment. An ointment composed of equal parts of extract of belladonna and ointment of iodine, spread upon a piece of chamois skin large enough to cover the nose, was kept constantly applied over the nose. The object of the belladonna in the ointment was to remove the pain and to relax the infiltrated and thickened cuticle, so as to render the iodine ointment readily and quickly absorbable. The reason for the use of this compound ointment on an unbroken surface is obvious to an observer.

I always aimed to allow plenty of time for each of the applications to the nose and throat to have its local alterative effect upon the diseased membrane; and this required more than an hour. The treatment is not pleasant, especially the solution of iron. When the iron was applied to this patient's throat, he would be seized with the most terrible nausea and retching; but a little whiskey relieved this more promptly than anything else I ever tried. The other local remedies were not so severe nor did they taste very unpleasant; but when the subsulphate of iron was applied to the diseased part of the pharynx, its effect was felt severely.

As a finish to the other local treatment, I applied by insufflation iodoform mixed with sufficient boric acid to render the powder divisible to the point proper for insufflation.

There was one thing in the history of this case worthy of mentioning, from both a physiological and pathological standpoint. The man was one of a family of nine children, six of dark and three of light or blonde complexion. The children with light complexion were troubled with inveterate eczema, which did not manifest itself until those subject to it arrived at the age of maturity. In the case of my patient, it is worthy of note that when the nose and throat gave evidence of the greatest degree of malignancy, the eczema disappeared from the skin. And as soon as the throat and nose showed a disposition to yield to treatment, the skin disease commenced to re-establish itself upon the surface of his body. Now, does this fact indicate that the skin disease and the cancer were two manifestations of the same hereditary cachexia? That there existed a strumous or scrofulous diathesis is evident, and it must have dated back for generations. The mother of the patient was troubled with a skin disease, though no cancer was ever known to exist in the family. May not the cancer in the case have been only a culmination of the scrofulous taint?

The constitutional treatment prescribed consisted of a combination of tonics and alteratives which was not only to assist in effecting a cure, but also to obviate, if possible, the recurrence of the disease in some other part of the patient's body, and was as follows:

℞ Syr. ferri iodidi . . . . . f℥ij
Liq. arsenicalis . . . . . f℥iv
Ext. conii fld.,
Tinct. nucis vom. . . . . āā f℥iij
M. Sig. Twenty drops three times a day, increasing one drop every four days.

Of course, the constitutional effect was watched as a guide; but it is astonishing to see what large doses of these powerful drugs a patient laboring under this diathesis will bear, when they are not increased too precipitately.

As a year has elapsed since his cure was effected, and as Mr. C. is enjoying excellent health, I feel safe in reporting this case for the encouragement of the profession.

Several years ago I treated a case of cancer of the throat, and, although the woman got well, I did not dare report it, as the patient was an obscure one, and her surroundings not such as would protect my unsupported statement of a cure from cavil. But in the case just described, the intelligence of the patient, and the fact that the case was seen by a number of other physicians during the treatment and since his recovery, make it proper to report it as a cure.

—The *Lancet*, Nov. 24, 1888, says that the Professorship of Medicine in the University at Vienna, made vacant by the death of Professor von Bamberger is, it is said, to be given to Professor Schrötter, whose name is best known in connection with laryngology. Professor Schrötter is, moreover, a general physician of great ability. His appointment is likely to be hailed with pleasure by English and American students, as he not only speaks English, but lectures in German in so simple a manner and with such distinctness of utterance that it is much more easy for a foreigner to understand him than many of the other teachers in Vienna. Meantime, the lectures at the late Professor Bamberger's clinique are being delivered by Dr. Neusser.

FOREIGN BODY IN PERITONEAL CAVITY.

BY J. L. CRAWFORD, M.D.,
PRESIDENT WESTMORELAND CO. MEDICAL SOCIETY, GREENSBURG, PA.

On August 18, 1888, Mrs. K. consulted me at my office, giving the following history: Her age was twenty-eight years, and she was married six years ago, and had been a widow for two years. On July 16, having passed her regular time for menstruation, she concluded that she was pregnant, and at the suggestion of a friend, in order to bring the matters right, she resorted to the use of a lead-pencil, passing it as she thought into the womb. Hemorrhage came on in a short time afterward, and an hour later when she attempted to remove the pencil she could not find it; but felt confident that it had not come away. She then sent for Dr. McDonald, who resided near by. He examined her carefully, but failed to find the pencil and as there was no pain nor appearance of injury or laceration, he discredited her story; believing that if she had used a pencil at all, it had come away without her knowing it.

The woman continued to perform her household duties until August 18, almost five weeks, without any pain or other symptom of trouble. On that day a very tender spot appeared on her abdomen, at a point three inches below and two inches to the right of the navel. Movement became painful, and in this condition she came to my office, reciting the history given above.

I had but little faith in her story, as I thought it was impossible that a foreign body such as a lead-pencil could remain in the abdominal cavity for so long a time without exciting acute peritonitis; but I proceeded to make a careful examination and was satisfied that I felt the pencil in the abdominal cavity just where the soreness and tenderness had developed. I sent for Dr. R. B. Hammer, who came to my office and, after a careful examination, concurred in my opinion. This was late on Saturday evening. As the woman was not able to arrange for operation on Sunday, it was postponed until Monday morning, August 20.

By this time peritonitis had fully developed, and she had suffered intense pain during Sunday and Sunday night; her abdomen was swollen and tympanitic; and her pulse was one hundred, and wiry.

She was anæsthetized, and, with strict antiseptic precautions in every particular, assisted by Drs. R. B. Hammer and C. C. Porter, I made an incision through the belly-wall about eight inches long in the median line, commencing near the navel. The pencil was soon found lying transversely, one end near the navel and the other penetrating the ascending colon. The edges of the wound in the colon were freshened and closed by three fine cat-gut sutures.

The intestines and peritoneum were in a highly congested condition. The abdominal wound was closed first by interrupted cat-gut sutures passed through the parts on each side, then a continuous suture was used and the wound perfectly closed except a very small angle at the lower part; no drainage tube was used, the usual antiseptic dressings were applied.

The patient rallied quickly and well from the operation. The after-treatment was conducted by Drs. McDonald, Porter, and Hammer. The patient was kept well under the influence of morphine for several days. She vomited considerably for two days after the operation. Her temperature at no time exceeded 100°, nor did her pulse go above 90. The wound healed by first intention throughout its whole extent. Three weeks from the day I operated, she came on the train and walked four squares to my office; and at the present time she has fully recovered, and for several weeks has been doing her usual work, washing, ironing, etc.

The room in which the operation was performed was a small, low, dingy place. The next day after the operation, the room was flooded during the great rain-storm of August 21, so that in her fright the patient jumped out of bed and was then carried upstairs, by a narrow crooked stairway; but, notwithstanding all the unfavorable surroundings, she made good and rapid recovery.

The part she penetrated in passing the pencil up must be a matter of conjecture. Neither the womb nor any part of the vagina showed signs of laceration at the time I examined her. The pencil was an ordinary lead-pencil, six and three-fourths inches long, with a smooth brass cap on the end which she says she passed first. The lead and glue were softened. The pencil was removed intact, yet it fell apart when exposed to the air.

The points of peculiar interest in this case are just how and through what parts it penetrated in passing, and the tolerance by the peritoneum of the foreign body for so long a period.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, November 7, 1888.

The President, J. Solis-Cohen, M.D., in the Chair.

Dr. J. M. Baldy read a paper on the

Treatment of Peritonitis,

in which he said that his views are considered somewhat radical from a medical point of view; but he thinks they are views toward which surgeons are gradually drawing nearer and nearer, and of which actual experience is daily demonstrating the value.

Peritonitis arises from a great variety of pathological conditions, and in dealing with it the origin of the inflammation must always be taken into consideration. The plan of immediately putting every patient with this disease on the opium treatment has ceased to prevail. No one would think of pursuing such a course in a peritonitis following rupture of an abscess, for instance, provided an abscess was known to have ruptured; nor in the case of a penetrating wound of any of the hollow viscera, with extravasation of the contents into the peritoneal cavity. The first thing to be determined when called to a patient suffering with peritonitis is the cause of the trouble. This is not by any means an easy thing to do. A patient may present all the symptoms of peritonitis, but on close examination prove to have an inguinal hernia. The temptation here is immediately to set this down as the cause, and proceed accordingly, especially if the hernial mass is tender, and presents other symptoms of excitation, where before it had been quiescent. In such a case one may readily be misled, and the real cause found to be something else. Again, although the books lay down most beautiful rules for diagnosticating the different varieties of intestinal obstruction, it is often impossible to say more than that there is probably mechanical obstruction of some kind or other, somewhere in the abdomen; but even then one cannot be sure but that the obstruction is caused by the peritonitis, and not the peritonitis by the obstruction. Dr. Baldy has seen peritonitis in cases in which, on examination, it was not at all certain that the pelvic contents were at fault; and yet an operation showed that they were. He could go on indefinitely multiplying instances of mistakes of this kind, and mistakes which are perfectly justifiable in the majority of cases. It is simply impossible in a large number of instances to do more than guess at the real cause. But although the cause cannot always be detected from a mere examination of a patient, it does not follow by any means that the disease has arisen idiopathically. Dr. Baldy does not, however, deny the possibility of its existence.

On the other hand, cases of peritonitis are constantly occurring in which the diagnosis is comparatively easy, and the indications for treatment plain; while the exact condition of affairs remains in doubt, the best men may hesitate, and often this hesitation is responsible for the unfortunate ending. Given a correct diagnosis, however, there should be no hesitation as to the course to pursue.

The author unhesitatingly condemns the use of opium in any of its forms. He says: "I think the use of this form of drug, in these diseases, tends rather to increase the trouble than to diminish it; at any rate, if it does not do damage *per se*, it certainly puts the parts in an excellent condition to continue on in the course in which they have started, and blinds us to the damage being done. In a paper read before the Obstetrical Society last November, on 'The Use of Salines in Peritonitis after Laparotomy,' I dealt with the use of this drug quite extensively, and my convictions then stated have been constantly confirmed and strengthened, not only in peritonitis following operation, but in peritonitis from all causes."

Opium, he says, also almost invariably causes tympanites, with all the accompanying dangers of over-distention, and it has caused death from cardiac paralysis. Further, the drug lures the physician into a false sense of security, and benumbs all his desires to make any further effort in the patient's behalf. The pain and tenderness being relieved, and the sufferer comparatively comfortable, he stands by and waits, the waiting as often leading to the coffin as not. After having stupefied and benumbed the patient, a consultant is perchance called in to the case, only to find his hands tied, by having all the symptoms masked, and with no possible way of knowing what progress the disease is making except by a surgical procedure, and this, in view of the fact that the patient *seems* better, he dares not propose.

In great contrast to this picture stands

the results of the use of salines. Here the bowels are put into active peristaltic action; this motion tends to prevent the formation of adhesions and bands; the peritoneal cavity is drained of the products of inflammation; the inflamed surfaces are relieved of all engorgement by a thorough depletion of the vessels in the intestinal walls; the inflammation is most effectually stopped; the pulse and temperature almost immediately improve, and the pain is relieved as quickly as by the use of opium. This, theoretically, says Dr. Baldy, may seem strange, but he nevertheless declares it to be a clinical fact.

While writing this paper the author says he was called to a woman sixty years of age, with symptoms of acute peritonitis, but the cause of the attack could not be detected. Salines were administered, and in much less than fifteen hours the belly-walls were shrunken and flabby, permitting of free manipulation, with hardly any evidence of pain; vomiting had ceased; pulse and temperature were both in good condition, and, in fact, all the symptoms were rapidly disappearing. She had passed a most comfortable night, sleeping almost the whole of it. In twenty-four hours more he had discharged the patient, notwithstanding the fact that the case had appeared so bad when first seen, that he had notified his nurse to be ready for a possible operation the next day. This same result, he asserts, has followed this treatment so often and so constantly in his hands that he has come to look for it with certainty. Of course, if a strangulated hernia is suspected, or pus in the peritoneal cavity, or obstruction of the bowels by an organic lesion at any point, he would not think of resorting to purgation, but would immediately turn to surgical resources.

The sources of a peritoneal inflammation are so numerous, it would be useless to attempt farther to enumerate them; but he thinks the general rule might be safely laid down, that where it can be demonstrated that the disease is caused by an organic lesion, abdominal section is indicated; and that, in addition, those cases which refuse to yield speedily to purgative treatment should be immediately dealt with in the same manner. When a pus-sac is known to be at the bottom of the trouble, or an appendicitis is in existence, it is folly to employ drugs of any kind; and where drugs are used and relief does not quickly follow, whether the cause is known or not, it is equally unwise to delay longer. The source of the disease once removed, the peritonitis will rapidly disappear. Cases reported in the journals are constantly demonstrating the worthlessness of all medical interference, and are steadily pointing to the fact that peritonitis is preëminently a surgical disease, and should not be intrusted in the hands of a purely medical man, but should be always and at once turned over to the surgeon. An abdomen containing pus, either encysted or free in the cavity, whether produced by puerperal disease or any other, demands opening and removal of that pus. If there is not active peritonitis present, the person afflicted is liable at any minute to be so attacked. This fact does not seem to be sufficiently understood, and physicians are continually treating pelvic abscess with local applications, electricity, etc., sometimes suspecting the true condition, at others mistaking it for some other condition, such as tubal pregnancy, for instance. Where an intestinal obstruction, an appendicitis, an inflamed tubal condition, a penetrating wound of any of the viscera, a tumor, or any one of a dozen other troubles is found, it should be dealt with according to our present surgical light. In such cases as these, peritonitis is not a disease, but merely a symptom, and when the original cause is removed the trouble subsides at once. Often the mere opening of the abdomen, together with irrigation and drainage, is sufficient. This seems especially to be true of those cases of tubercular peritonitis, so many of which have lately been springing up, and to which attention was called by the author in his paper on "Exploratory Laparotomy" last spring. He then showed that six deaths from various causes had taken place out of thirty-six cases collected in Germany, and only one death out of seventeen cases which he had collected in this country. This death was due, not to the operation itself, but to defects in the details of the operation. In all these cases irrigation or drainage, or both, followed the operation, and seemed all that was needed to effect a permanent cure.

In conclusion, Dr. Baldy says that when called to attend a patient suffering with peritonitis, we should first determine the cause, and if it is found to be an organic one, the immediate use of the knife, followed by irrigation and drainage, is the only proper method of procedure.

If the cause is found to be functional, the use of purgatives, followed, if necessary, by enemata, is indicated; and these failing

to relieve quickly, surgical measures should soon follow.

If the case is of doubtful character, he would be inclined first to try the purgatives, and stand ready to interfere with the knife at a moment's notice.

He admits, however, that it is impossible to lay down any absolute general rules for the treatment of every case, as each one must be a study by itself.

Dr. Arthur V. Meigs read a paper on

The Treatment of Peritonitis.

The question how to treat peritonitis is one of the greatest importance, and upon the decision eventually reached will in the future depend the lives of many patients. Should the leaders of our profession decide that the administration of saline purges is the best treatment, and this be for a few years taught in the schools, the ordinary practitioner will soon acquiesce. If such a consummation is to be deplored, now is the time for us who are of the contrary way of thinking, to protest.

To me it seems clear that before any conclusion can be reached, it must first be acknowledged that peritonitis, as ordinarily seen, diagnosticated, and treated by physicians, is so different from the lesion or disease which has been successfully dealt with by surgeons by the administration of saline purges, that it must be recognized that, from the standpoint of therapeutics, the two questions are as far apart as though there were two widely differing diseases.

As a therapeutic measure, no one disputes the wisdom, under some circumstances, of making an attempt to abort an inflammation; and yet it is equally well known that such an attempt, when made after the inflammation has progressed so far that to abort it has become impossible, must not only fail, but equally certainly will be productive of positive harm. It is a common rule of treatment, and one that holds good in the great majority of instances, that an irritated, sore, or inflamed part is to be put as nearly as possible at rest, and that whatever increases the pain suffered is likely to be injurious. Why shall we make an exception to this rule in all cases of peritonitis by giving salines, which throw the bowels into a state of great activity, and increase the pain, at the same time denying the patient opium, which equally certainly relieves?

I have been and am an advocate of the use of opium in all cases of peritonitis as seen by physicians, but at the same time I have never denied my patients the use of laxative medicine, and it is, I am sure, by the judicious administration, according to the special needs of each particular case, of the two seemingly diametrically opposed drugs that the best results will be attained. The reason, probably, that the use of opium in the disease is being decried is that it has been abused. It should not be given to the point of narcosis, nor should it be expected that in cases of severe peritonitis the pain will be abolished. Measurable relief only should be looked for, with alleviation of the terrible colicky pains so characteristic of the disease in its full development. I have never been a believer in the treatment by the use of anodynes exclusively, and think it absurd to talk—as I have heard—of purging the patient by the use of opium and belladonna. If we had six months in which to work, and could first establish the opium habit in the patient, we might, perhaps, encourage diarrhœa, or at least not interfere with it, by the administration of opium. In a disease, however, which lasts usually but a few weeks at the very outside, such an expectation can end but in disappointment. The treatment that will give the best results, according to my view, is the following: in all cases in which no physical obstruction can be diagnosticated, for which operation must be at once recommended—and this should include doubtful cases in which operation may subsequently become necessary—there should be prescribed liquid diet, small quantities every two hours, and every two hours a quarter of a grain of opium, and one-twelfth of a grain of extract of belladonna. To this may be added, if it should seem advisable on account of pain, the administration twice, or at the outside, four times in twenty-four hours, of a one-grain powdered opium suppository. At the same time injections of warm water, with or without soap, should be given once to three or four times daily. If flatus is passed, the case continues to be a very hopeful one. This course should be rigidly adhered to for from twenty-four hours to five days, or possibly longer, when the time will have arrived at which it becomes necessary to consider the propriety of using some sort of aperient.

Purgatives are given in peritonitis for two distinct purposes: first, to increase the peristalsis, and thus overcome obstruction; and, second, to induce large watery movements, for the purpose of directly depleting the abdominal, and especially the intestinal, blood-vessels. After operations, inflammation in greater or less degree is so common,

and we are so well aware that it is liable to occur, as to be always prepared to meet it. This being the case, it may be met in its very incipiency, and if inflammation can ever be aborted, it is under such circumstances. The explanation of the success, therefore, of surgeons in treating peritonitis with large doses of saline purgatives would seem an easy one, for they deal with a stage of the disease which never comes under the management of physicians, as people in the early stages of the disease do not seek advice; and, besides, if they did, the differential diagnosis between idiopathic peritonitis in its earliest stage and enteritis or mere intestinal irritation would be an impossible one. No one, I think, should deny surgeons the credit their courage deserves for having instituted this revolutionary method of treatment, for, measured by our old standards, it is revolutionary; but at the same time we must not err upon the other side, and with undue haste conclude that the method is applicable to all cases. I have long been of the opinion that the old surgical practice of shutting up the bowels for a week, with opium, after an operation for hemorrhoids, is a bad method.

Having, then, quieted our patient somewhat during the first few days of attendance, with injections and liquid food, and belladonna and opium, and at the same time been very careful not to induce narcosis, or in the least to depress the respiratory forces, for, if we do, the remedy will be worse than the original disease: we must, as already said, consider the propriety of getting the bowels moved. The decision in regard to the precise moment at which this attempt is to be made is, in my opinion, one of the most delicate questions that can arise in therapeutics, and gives to each of us, when we meet it, an opportunity to show a real genius for the treatment of disease. The medicine, however, which shall be given is very easy to decide upon—here there is no inflammation in its early stage, and, therefore, there can be no question of aborting it. Salines could only act upon the bowels like other drugs, relieving tension, if you like, by abstracting water directly from the intestinal blood-vessels; but, so far as the mere moving of the bowels is concerned, they are by no means so effective, or, as the laity call it, "searching," in their action as some of the vegetable purgatives. Anyone who has been called upon to treat cases of fecal accumulation (a paper upon this subject was published some years ago by the speaker, in the *Transactions of the College of Physicians of Philadelphia*) will have learned how useless and ineffective are salines if the bowels are very sluggish, while small and repeated doses of vegetable purgatives are perfectly satisfactory and certain in their effects. In such cases salines, and even castor oil, will induce large watery stools, but no fecal matter is brought away, and it seems as though the fluid material had come from below the accumulated feces, or had come by, and the patient is no better off than before, though probably he will have suffered much pain. No better combination can be given than a pill consisting of a twelfth of a grain of extract of belladonna, a quarter of a grain of extract of nux vomica, a quarter or an eighth of powdered aloes, and a half or one grain of rhubarb. This should be given at first once or twice in twenty-four hours, and, if violent pain be set up—which, however, seldom happens—it should be stopped, and the opium and belladonna every two hours used again for a day or two, when the attempt with the aperient may again be made. After a day or two the pill may often be given every four hours, and I have often seen the obstruction give way under this treatment, and the patient entirely recover.

It would be most unfortunate, it seems to me, for the science of medicine, and still more so for those who in the future are to suffer with peritonitis, if the treatment of the disease with sedatives should be entirely abandoned, as has been recommended here this evening. Let us look at the question reasonably and without prejudice, and in the future assign to one class of patients operation by a competent surgeon, and saline purgatives afterward, if those skilled from a study of the subject in that particular direction judge that to be the proper course; and to the other, a reasonable use of anodynes and injections, with moderate doses of vegetable laxatives when the time comes for their administration. Because, in the past, the sedative method of treatment has been abused, and patients have been hurried out of the world by the unwise management of incompetent physicians who have narcotized them, is no reason why we should cast aside what is good in the method, any more than it would be wise for us now to assume that, because the administration of saline purges is advisable in the surgical treatment of some cases, it is therefore to be looked upon as a panacea in the disease, and the treatment to be recommended in all cases.

For my own part, I am a firm believer that the disease may arise idiopathically, and, when I say this, I mean from an attack of enteritis or violent indigestion, or from chilling of the body, just as I believe pleurisy may arise; and, in such cases, it is reasonable to suppose that the inflammation very soon becomes more or less generalized, though, of course, it must have had its origin at some point. Such cases as these, if it be conceded that they ever arise, are not amenable to surgical treatment, for there is no point of special obstruction, and operation could not effect any good, unless by merely cleansing.

In conclusion, I cannot, perhaps, better emphasize the correctness of the statement that the treatment by sedatives should not be abandoned in all cases of peritonitis, than by calling your attention to the fact that in many cases in the past, and the same thing is certain to occur again in the future, post-mortem examination has demonstrated that the disease was so extensive or of such a nature as to be necessarily incurable. Under such circumstances, I think, no one will dispute that the province of the physician is to do what he can to soothe pain, and make the last days and hours of the patient as endurable as circumstances permit, and no other one drug will conduce so much toward this end as opium.

Dr. J. H. Musser, in opening the discussion, said that he believes cases of idiopathic or so-called functional (?) peritonitis must be very rare, for in the course of a tolerably large experience he has not met with any. A successful treatment of all cases must depend, in the first place, upon the recognition of the many antecedent pathological conditions that may be considered as causal. A large majority of the cases which he has seen recovered without resorting to surgical measures. In these instances a similar plan of treatment to that suggested by Dr. Meigs was to a certain extent carried out, notwithstanding the fact that a local or a focal origin of peritonitis could always be determined. The plan of treatment which he has carried out in most of the cases has been rather simple, beginning in the first place with local depletion either with blister or with leeches —not fearing the depressing effects of local depletion, but rather encouraging further bleeding by following the depletion with poultices, and possibly by general stimulating applications, such as turpentine. He endeavors to open the bowels as early as possible, and uses principally, if vomiting is present or not, calomel in doses of one-twelfth, one-eighth, or one-fourth of a grain every hour or half-hour, until the desired effect is produced. He is not disturbed if, in addition to the purgative effect, he gets a constitutional effect of the drug also, for its antiphlogistic effects in peritonitis are undoubted. With regard to opium, he uses it simply to relieve pain, and hence in the smallest doses possible. He prefers the hypodermic injection of morphia, of which sometimes an eighth or a sixteenth of a grain, twice daily, will suffice. In addition to the anodyne effects of the drug, its stimulating effect is of service; and after the mercurial has acted on the bowels, he combines the extract of opium with the drug, giving the opium more and the mercury less frequently. Usually he uses atropia with the morphia, and in this way counteracts the depressing effects of the opiate. Stimulants are worthy of mention. He begins their use early and from the first twenty-four hours in some cases permits them as the only kind of food administered until all danger is past. He gives them early in order to avert or to mitigate the stage of collapse which is likely to ensue. With this general plan of treatment—bleeding, moderate purgation, opium to relieve pain, and the use of stimulants—his patients have usually recovered.

He thinks patients die of peritonitis generally, not because its management is not understood, but because it is not recognized sufficiently early. Hasty examinations without due regard to the local origin of the symptoms of the disease—and of these pain is usually the earliest—cause one frequently to overlook the actual condition of the case. Of this fact he gave two illustrations; the first patient he saw in consultation, the second at the autopsy; both were cases of peri-cæcal abscess. In one instance the patient was ill for four or five days before Dr. Musser's visit. Prior to the last twenty-four hours he visited his physician's office, simply complaining of recurring attacks of sharp abdominal pains, which were attended with a moderate amount of diarrhœa. The physician looked upon it as a case of cholera morbus, and treated it accordingly. The day of his death the patient did not leave his bed, but was visited by the physician, who was horrified to find him in collapse. The thready pulse, the persistent watery vomiting or regurgitation of fluid, the cold sweat and the cold extremities, the tympany and the rigid abdominal muscles, told the tale more

plainly than his words, and an area of dulness in the right iliac fossa, with faint local swelling and tenderness, pointed to the appendix as the probable source of the inflammation. Death ensued a short time afterward, and at the autopsy a most extensive peritonitis, secondary to rupture of the vermiform appendix and peri-cæcal abscess, was found. In the other instance the patient, a lad sixteen years old, was seen by the physician at six in the evening. In the hurry of his work he neglected the minute examination which he usually bestowed upon cases, and prescribed for what he thought was a colic, induced by indigestion, which colicky pains had been going on for two or three days, the patient, however, being out most of the time. He saw him later in the evening, much improved, apparently, from the effects of opium, and was shocked to hear the next morning that at six o'clock his patient had died in collapse. In this case foreign bodies in the appendix had caused the usual rupture, with peritonitis and death.

The most difficult question for the physician to decide, and the one that has always been the most serious in Dr. Musser's mind, next to the grave question of when to open the bowels, is when to ask the surgeon's help. Given a case with a palpable tumor, with local œdema, the fever, the vomiting and the general tenderness indicating a general inflammation, and the question is an easy one to decide. On the other hand, the tumor being obscure, possibly only an area of dulness outlines it, the symptoms, however, becoming threatening; shall we then ask for help? He himself invites surgical aid when persistent vomiting continues, when the night-sweats become marked, and when tympany and bowel obstruction are decided. After the second night-sweat, even if there is no general peritonitis, but physical signs or clinical phenomena of local disease, he is much disturbed. The increased frequency of pulse, or perhaps the signs of approaching collapse, which thus far in his cases he has not waited for, would induce him at once to ask for a surgeon.

He has never been impressed with the value of salines in peritonitis. In but one instance were they of any service in his experience, and this was after an abdominal section.

In the so-called cases of recurring peritonitis, if a second attack occurs, he advises at once operative interference, either before the attack has terminated or after the attack has subsided.

In corroboration of his remarks as to the value of the medical treatment of peritonitis, Dr. Musser quoted the experience of Dr. Girvin, who is a most careful, astute physician. He said recently that he had never lost a case of peritonitis, and that his plan of treatment is the use of some remedies to open the bowels, along with the use of remedies to allay the pain. To open the bowels he usually gives a pill containing a quarter or a half a grain of calomel, half a grain of extract of rhubarb, half a grain of aloes, with one-eighth or quarter of a grain of the extract of opium. Giving the pill early, he very soon secures a purgative effect, and when that is induced feels much more comfortable in regard to the welfare of his patient. He uses morphia by subcutaneous injection, and only in sufficient doses to keep the patient comfortable throughout the illness.

Dr. M. Price said: I do not believe that peritonitis is ever idiopathic. Call it by what name you please, it resolves itself into some irritation or lesion. Carbolic acid, almost pure, and phenol sodique, in its full strength, I have known to be poured undiluted into an abdomen after an operation. There will always be peritonitis after operations until so-called antiseptic surgery of the peritoneum is abolished. Mr. Tait is correct in saying that the opium treatment has its place only when you have given up all hope of curing the patient and want to make him comfortable. You make him perpetually comfortable. You not only put the bowels in splints, but the whole body in a fracture-box. Prof. George B. Wood, thirty years ago, advocated after bleeding, calomel, and purging with Epsom salts and senna, and perhaps somebody suggested it before him. But in recent times the credit of the saline treatment belongs to Mr. Tait, and Dr. Baldy does not claim it. Something was said of five days' treatment. The case should be in the surgeon's hands before that. There is already pus.

The tympany is of several kinds. The distention is often the cause of death. I have opened the belly and found a diverticulum adherent to omentum, with the intestine through it; the intestine was returned without difficulty; the distention was the cause of death. Many cases that recover are of such character. If we knew it, purging would be out of place. In operations when there are sharp pain and indications of inflammation, then we do not wait. We open the belly

and supply moisture. We pour in hot water—gallons of it—and give turpentine enemata and Epsom salts.

The bowels are already in splints. I have given six ounces of Epsom salts where ordinarily half an ounce would answer. As soon as free movement occurs the patient recovers.

Dr. C. B. Nancrede says he is a living specimen of recovery without section after an appendicitis. No one has here advocated the use of a drug valuable in the sudden collapse incident to the onset or in the later stages of some cases of peritonitis, when opium means death. That drug is atropine, hypodermically, in large doses. If opium is only to be given to relieve pain, this is not what was formerly understood by the opium treatment. It will not splint the bowel in mere anodyne doses, which was Alonzo Clark's original idea, and that of all his followers since. He disagrees with the men who would send for the surgeon to lock the stable door after the horse has escaped—in other words, wait, as is too often the case, until an operation is what is termed a "last resort," which amounts really to there being no reasonable chance for a success which an earlier resort to the knife would have very probably insured. The surgeon should be permitted to see the case *early*, and share in the decision as to when the operation should be done, when it should be postponed, and when declined; it is only by the chance afforded by a study of the *medical course* pursued by the case, that the surgeon can operate intelligently and successfully. He is using less opium as he grows older in all surgical work. He has tried the saline treatment of peritonitis in several cases after section, and has had no cause to regret it.

Dr. Joseph Price said: Dr. Meigs counsels delay. On the contrary, the earlier and simpler the operation the greater is the chance of recovery. I cannot, therefore, conceive any advice more unfortunate, more unjustifiable, for patients dying of peritonitis. In fact, the whole tendency of modern surgery is to anticipate exhaustion, shock, and collapse. The paper of Dr. Baldy referred to peritonitis, and not to pain and tenderness; and my remarks are devoted to peritonitis due to a recognized lesion, and not to pain and tenderness. The treatment of peritonitis resulting from external or infectious origin would be entirely irrational were drainage discarded. Once decide that the best method of clearing up a peritonitis is by operation, then drainage must follow that operation as naturally as sutures are used to close an incision.

If a peritonitis is septic in its origin, such as is seen frequently after criminal abortion, carelessness after miscarriage, and after gonorrhœal tubal disease, drainage is the third statement of the argument of operation:

1. Operation is required.
2. Douching and flooding the abdomen are necessary.
3. Drainage is the bulwark of the whole procedure.

That cases of infectious peritonitis recover without drainage is no more an argument against it than that some patients recover from small-pox, never having been vaccinated. If I use all the antisepsis possible before and during an operation, and at its close overlook the fact that I am leaving a possible infection behind, my antisepsis is only a parade, and misleading. If Listerism is the foundation of modern surgery, drainage is the keystone of its application in such cases of abdominal surgery.

Dr. Tyson said: I came to the meeting to-night attracted by the subject under discussion rather than to make any remarks, but I feel disposed to give expression to the general impression left upon my mind by this debate. I confess that when I heard Dr. Meigs portray his typical case of peritonitis I felt that the treatment he advocated would be the one I should always prefer to follow. Yet I do not think the parallel he drew between the state of the peritoneum in peritonitis and that of a "sore" is altogether justified. The inflamed peritoneum is rather to be compared to the earlier stages of inflammation in which we resort to leeching and depletion, and I have, by what has been said since, been strongly impressed by the rational character of the saline aperient treatment. It has the further advantage in quickly cutting short those doubtful cases in which a fecal accumulation is producing pain, the first symptom of inflammation, which disappears at once with its cause—the fecal mass.

I desire to call attention to a fact not mentioned, that rheumatism of the abdominal muscles sometimes simulates peritonitis so closely as totally to mislead. I have myself had this experience, and seen the symptoms yield with magical promptness to salicylate of sodium.

Dr. Meigs said: I cannot see why anyone should doubt the possibility of the occurrence of idiopathic peritonitis any more than of idiopathic pleurisy. There is

no reason, in the nature of things, why it should not occur, and that some physicians have not met with it is no proof that others who say they have are mistaken. Pleurisy, by extension of the inflammation, may be the cause of pericarditis, and in cases of diaphragmatic pleurisy peritonitis to some extent is a common secondary result. If there be diarrhœa, with inflammation of the mucous coat of the bowel, why should it not give rise to peritonitis? It seems to me that in the discussion the difference between peritonitis, as seen by those of us who are not surgeons, and the disease as a sequel of operations, has not been sufficiently kept in mind.

Dr. Baldy, in closing the discussion, said: Dr. Meigs and Dr. Musser believe in the opium treatment, and yet after giving opium for a few days they give purgatives. I should like to ask them what object they have in view when they give the purgatives, and what they expect to accomplish with them?

Theoretically it is perfectly possible to have idiopathic peritonitis. Practically, however, I have never seen it. Some of the gentlemen in discussing this subject seem to draw a line between the cases of peritonitis seen by the physician and those seen by the surgeon. Peritonitis is peritonitis the world over. It makes no difference whether it is set up by the surgeon himself or comes on idiopathically (so called): the result is always the same—inflammation of the peritoneum; the cause cannot alter the principles of treatment. My paper discussed peritonitis, and not simply pain and distention; as for an inflammation throwing out a bland fluid, I do not believe it. The products of inflammation are always irritating. Opium has been advocated here to-night in small doses and to relieve pain. In my experience small doses will not relieve pain. The dose must be comparatively enormous. Purgatives will relieve the pain as quickly as opium, and when once relieved it remains relieved, which it does not do with opium. If I were aiming at the relief of pain solely, I should most decidedly turn to my salines.

The objection has been made that salines give watery stools and do not carry away much feces. Of course, it is desirable that the fecal matter should come away, and so it does in great part. But large, watery stools are exactly what we desire to obtain. The whole principle of this treatment lies in its depleting powers. For this purpose the salines are given in large and *concentrated* solutions: they are peculiarly adapted to the early and highly inflammatory stages of inflammation. If purgatives are going to relieve, they will do so quickly, and we have no need of waiting for four or five days to know what to do next. Often, unless we use the knife, our patient is dead in five days. Recurring peritonitis always demands surgical interference.

Together with Dr. M. Price, I have but one use for opium in this disease—if everything else has failed, it is a good thing to give *ad libitum*, to ease the last hours of the patient.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Meeting of November 26, 1888.

The President, Alexander S. Hunter, M.D., in the Chair.

On taking the Chair for the first time the President read an address in which he referred more especially to the scientific purposes of the Society, and said it would be his object to obtain as good and as practical papers on practical subjects from able men as possible. He hoped the members of the Society would do their part and attend the meetings in large numbers.

The first paper was by Dr. William H. Thomson, on the

Significance of Cough and the Indications for the Use of Expectorants.

Dr. Thomson opened his paper with the remark that there is scarcely anything for which the physician is oftener called upon to prescribe than cough, and said that it is one of those things which, if not removed, many people look upon as the note of death. There is much to justify this dread. He does not think there is any class of prescriptions which the doctor, after some years, varies less than he does those for cough mixtures. But the habit is one least justifiable, since the indications for such mixtures vary greatly in different cases.

Dr. Thomson defines cough as a reflex act whose single motor or efferent mechanism is brought into play by a variety of afferent impressions. Its one important object is expectoration, but more frequently this proves useless. One of the commonest indications is to suppress useless cough and allow only that which will accomplish its purpose, expectoration.

The varieties of useless cough, he said, are not fewer than fourteen, and doubtless many more could be suggested. All useless coughs have one marked feature in common which distinguish them from expectorant cough. It relates to the sound; this in useless cough is always single, while in expectorant cough it is never so. If the non-expectorant cough were repeated, the sound would be like the distinct strokes of a hammer; while that of the expectorant cough is more like the sound of a chain passing over a pulley. Dr. Thomson accepts the observations of the Germans, which locate the sensitive points in the respiratory tract from the bifurcation of the trachea down to the second or third divisions of the bronchi. Fluids or foreign bodies below those points, or in the air cells of the lungs, do not excite cough; and in the trachea sensitiveness is present only in some states of inflammation. Passing to the larynx, other sensitive points are reached.

With regard to the varieties of non-expectorant cough, he first mentioned simple inflammatory irritation of the respiratory tract without secretion. The indication here, he said, is to turn the dry cough into an expectorant one as soon as possible; and among other remedies he uses tartar emetic in small doses in water. This cough, he said, is frequently present in chronic and acute bronchitis and in phthisis.

The co-existence of some secretion and more or less expectoration may lead one to overlook the non-expectorant cough. When there is an undue amount of the neurotic element, he gives chloral and morphine, which combination is preferable to morphine alone. It should be remembered, however, that these are drawbacks rather than advantages so far as the expectorant cough is concerned.

A second variety of useless cough arises from inflammatory irritation of the pharynx, and is common in ordinary colds, and also in advanced phthisis. The irritated parts may be benefited by the application with a brush of morphine mixed with starch, or by obtaining the specific effect of aconite on this mucous membrane. Another variety of useless cough occurs in irritation of the pleura. This origin of cough deserves, he said, special attention, and should lead the physician to adopt appropriate treatment to cure the pleuritic affection and avoid its results. Clinical experience shows that all serous inflammations are of serious import because of the conditions to which resulting adhesions may give rise. It is Dr. Thomson's custom in general pleurisy to strap the affected side, and to keep it strapped even as long as six months. Nothing else will do as much to stop the constant hacking cough. The same treatment is instituted in the annoying pleuritic cough of phthisis, when limited to one lung.

A specific useless cough is seen in whooping-cough. This, Dr. Thomson asserts, can always be stopped within a week by bringing about the constitutional effects of belladonna. If, however, a bronchitis is superadded there will be an additional cause for useless cough. A further variety of useless cough is the malarial, which is seen in children at night, and suggests whooping-cough. Quinine is indicated. Another variety is the nocturnal cough of children, due to intestinal irritation, as from worms, etc. The indications are plain. A seventh variety is called uterine cough, but the uterus need not itself be diseased to bring it about. It is seen also in hysterical women. When the uterus or its appendages are diseased, they should be treated accordingly; and, when the hysterical element predominates, valerian, bromides, etc., should be given. A purgative is often indicated. The aneurismal cough is best relieved by morphine, but it is surprising how often it can be warded off by a couple of leeches to the sternum. Then there is the useless cough due to pressure of an enlarged bronchial gland upon the pneumogastric. When the gland softens, the cough and the vomiting will both cease, but relief may be obtained in the meantime by dry cups between the shoulders. Foreign bodies in the auditory canal are mentioned in the books as a cause of reflex cough. There is also the useless cough from irritation of the phrenic nerve, from perihepatitis, etc. Cerebral cough is of importance, and is likely to arise from disease at the base of the cerebellum, from abscess, etc., pressing upon the medulla.

The indications for treatment of expectorant coughs are two, in some cases three. They are: to make the phlegm so liquid as to flow easily, and to make the cough sufficiently powerful to prove effective. The third indication, present in some cases, is to diminish superabundant secretion. In children with capillary bronchitis or pneumonia it is especially important to loosen cough and to overcome dyspnœa. There is an associate action between the œsophagus and respiratory tubes, and Dr. Thomson has found the frequent swallowing of half a

teaspoonful of milk and lime-water by these little patients of marked benefit in favoring expectoration and relieving dyspnœa.

The commonest indication in bronchial cough is to make the bronchial secretion more fluid, and the only unmistakable agent for this purpose is oil. All oils increase the watery flow from mucous membranes, and he has learned by experience that the most effectual for increasing the flow from the bronchial mucous membrane is linseed oil. It is best taken in emulsion, which is made in quantity by thoroughly mixing the following ingredients: Linseed oil, 15 ounces; oil of winter-green and cinnamon, each 2 drachms; powdered acacia, 10 ounces; water, 24 ounces; glycerine, 5 ounces; simple syrup, 10 ounces; dilute hydrocyanic acid, 2½ drachms. Half an ounce constitutes a dose. He sometimes adds to each dose three minims of Magendie's solution of morphine and eight grains of chloral.

Dr. A. Jacobi, having expressed doubt during the discussion as to our ability to diagnosticate pressure upon the pneumogastric nerve by enlarged bronchial glands, the author of the paper said it would hardly be possible to do so by auscultation or palpation; but the signs which he has relied upon are: vomiting; cough without expectoration; irritation of the stomach, with deep injection of the pharynx; aphonia without ulceration of the vocal cords; lastly, palpitation of the heart. This concatenation of symptoms, when present, points to pneumogastric irritation. His diagnosis has been confirmed in three cases by subsequent autopsy.

The paper was also discussed by Drs. Beverley Robinson, Clarence Rice, Simon Baruch, O. K. Tansley, and Darlington, who criticized some points, and referred to other varieties of useless or reflex cough, as from diseased conditions of the nose, of the external auditory canal, etc.

—Dr. Edwin R. Lewis reports to the *Boston Med. and Surgical Journal*, Nov. 29, 1888, that he recently delivered a woman of a female child which weighed 15 pounds and 2 or 3 ounces.

—About 150 refugees entered Jacksonville, Florida, Dec. 10, under the resolution of the Board of Health permitting entry provided the people go out of the city again at night. There have been no new cases of fever and no deaths. Pensacola and Escambia Counties, Florida, are to abolish quarantine against all places.

Foreign Correspondence.

LETTER FROM BERLIN.

Decadence of Classical Learning Among German Physicians.—Relation between Tabes Dorsalis and Heart Disease.—Propriety of Puncture in Hydrocephalus.—Extirpation of One-Half the Thyroid Cartilage.—An Early Sign of Phthisis.

BERLIN, Nov. 16, 1888.

The learned clinicians of the class of which Prof. Frerichs was the type, whose lectures bore witness to his classical studies, have of late become almost extinct in Germany. It is true, Frerichs' position as Chief of Internal Medicine has been filled by Prof. Gerhardt, from the Würzburg School of Medicine, who had acquired considerable fame through his writings about diseases of children, carcinoma, and some other affections; but the excellence of Frerichs' clinical and didactic work has never since been attained. It is said that Prof. Leyden, the famous neurologist, is a good representative of the classics in medical science as once taught by Frerichs; and, indeed, a clinical lecture by Prof. Leyden is as delightful as it is profitable. Your correspondent was invited last week to listen to Prof. Leyden's lecture on the connection between tabes dorsalis and heart disease, before the *Berliner Verein für innere Medicin*. The term tabes dorsalis is the name for locomotor ataxia used by German physicians, which has of late been also frequently used by English and French writers. The coincidence of locomotor ataxia and cardiac disease is rather rare, and it is only recently that the attention of clinicians has been directed to it. It is singular that in an affection as long and as well known as locomotor ataxia new symptoms of importance should continually be described. Among these recently observed symptoms of tabes dorsalis the so-called visceral complications, described by Charcot under the name *crises gastriques*, claim our special attention. Charcot was the first to discover a connection between vomiting and tabes. At the same time he noted intestinal, urinary, respiratory, and even cardiac symptoms arising in connection with the disease. He observed the quickened pulse in tabes as a permanent symptom. Besides, there were found to occur valvular lesions and angina pectoris. Berger and Rosenbach were the first to call attention to valvular disease in the course of locomotor ataxia, and also to the interesting question whether there is an

etiological connection or a mere coincidence between the two affections. It seemed probable that the cardiac branch of the pneumogastric nerve became affected and thus secondarily led to valvular affections. Berger and Rosenbach report seven cases of locomotor ataxia accompanied with symptoms of pronounced insufficiency of the aortic valves. Viewed pathologically it would appear as if these valvular lesions were connected with the various trophic changes occurring in tabes, such as muscular atrophy, perforating ulcer of the foot, degenerative changes in the joints (athropathy), and skin-eruptions. Analogous trophic changes may lead to degeneration of the valvular apparatus. If this, however, were true, it would be an occurrence without analogy in medicine. Besides, the two affections are sufficiently common, especially in middle life, to warrant the belief in a mere coincidence rather than in a pathological connection. Mitral lesions have also been observed, by French writers, to occur simultaneously with locomotor ataxia. In the decision of the question whether we have to deal with a mere coincidence or not, of the greatest importance, of course, is the autopsy. If the *post-mortem* examination reveals no signs of arterio-sclerosis, the etiological relations between tabes and the valvular lesion would appear certain. Prof. Leyden's last patient in whom both tabes and valvular disease were observed, was a woman 48 years of age, a seamstress, hard-working, but in rather good health. Twelve years ago she first noted rheumatic symptoms, and for the last two years she was affected with dyspnœa, which ultimately necessitated her removal to the Charité. The pulse was 100, bounding and large. Near the apex there was a distinct diastolic murmur. There were no important nervous lesions and no disturbances of coördination; the knee-jerk was absent. The autopsy showed enlargement of the heart and dilatation and hypertrophy of both ventricles. The aortic valves were thickened and retracted, the papillary muscles thin and relaxed. The aorta was wide just above the valves, the intima thickened just at the arch. The spinal cord did not show any macroscopical lesion except a thickening of the arachnoid. We have now to decide, said Prof. Leyden, both from the clinical history and the result of the autopsy, whether the valvular lesions refer to an arterio-sclerosis or are to be regarded as a complication of tabes. The former evidently is the case. Prof. Leyden is, therefore, not of the opinion that the valvular lesions observed in the course of locomotor ataxia have any internal connection, but thinks that they are merely coincidental.

At the last meeting of the *Berliner Medicinische Gesellschaft*, Dr. Ehrmann presented a case of hydrocephalus and raised the question whether puncture is beneficial or harmful. Prof. Henoch, the eminent specialist in children's diseases of the Charité, replied that he often—five and even six times in one and the same case—performed the operation of puncture and subsequent compression, and that he had never seen any injurious results proceeding from it; but at the same time he never saw any benefits from it.

Prof. Küster presented a patient one-half of whose thyroid cartilage he had extirpated. The patient had a surprisingly good voice, and Prof. Küster explained that owing to a cold the patient's voice was less distinct than usual, and that it would become still better than it then was. His advice is to retain the thyroid cartilage in all cases, if possible. Dr. Kayser, of Breslau, spoke of the death of his brother, which resulted from the extirpation of a portion of the larynx, the seat of a carcinomatous ulcer similar to that in the case of the Emperor Frederick.

Dr. Sticker, of Munich, calls attention to a new and readily recognized symptom of phthisis, viz., a bright red line of demarcation between the teeth and the tongue. Sticker has examined one thousand patients for the purpose. He states that the symptoms which may precede tuberculosis, such as pseudo-chlorosis, dyspepsia, etc., are very probably the expression of latent phthisis, if the red line is present, and especially in young persons. The absence of the line, especially in female patients, is of no importance. In acute phthisis the line is of a bright red color; in chronic phthisis of a bluish, and in pronounced scrofulosis of a white color.

J. S.

—An outbreak of scarlet fever in Glasgow has been traced to a dairy; fourteen of the ninety-two families supplied from this dairy were found to be infected.

—Some physicians in Brooklyn have been swindled recently in the following way: During the absence of the physician a man calls and offers a check in payment of an imaginary bill less in amount than the face value of the check; the latter is, of course, spurious.

PERISCOPE.

Induction of Premature Labor.

M. Bayet, interne in Prof. Kufferath's clinic in Brussels, describes in *La Clinique* an attempt made under the Professor's direction to induce premature labor by means of the so-called elytro-pterygoid apparatus of Chassagny. This apparatus, about which a good deal of discussion has recently taken place in Belgium, consists essentially of a pig's bladder, which is folded up and introduced into the uterus, and subsequently distended by means of the injection of water, similarly to the "colpeurynter" which is used in German clinics. The patient in M. Bayet's case was a young woman of strong constitution, but with a rachitic pelvis, the conjugata vera being only six centimetres and a half, as measured by Van Huevel's pelvimeter. The woman was in the eighth month of pregnancy. M. Kufferath gave her the choice of having premature labor induced at once, or of waiting until her full time, and then submitting to Cæsarean section, with the hope of bringing forth a living child. She naturally selected the first of these alternatives. With this object Chassagny's apparatus was introduced and allowed to remain for half an hour in the uterus; it caused, however, severe pain, and was extremely difficult to keep in its place, besides which it produced erosions in the vagina, causing a bloody discharge. Further attempts were subsequently made, but these proved so painful and caused so much ulceration and œdema of the vagina that they had to be discontinued and the patient left alone for five or six days. These attempts to produce premature labor having entirely failed, a soft bougie was introduced, and in three or four days' time with a successful result. An attempt was made to deliver the woman with forceps, but the head refused to engage the brim. Tarnier's basiotribe was therefore applied, and the head crushed in all directions, after which extraction was easily effected. The patient made a good recovery. M. Bayet remarks that Chassagny's apparatus gave a very different result from that described by M. Hubert, who reported that he had been able to induce premature labor in an hour by its means. M. Bayet also remarks that it is impossible thoroughly to disinfect an apparatus composed of a pig's bladder, especially as it is necessarily introduced folded up, and therefore full of creases. Regarding the effect of the basiotribe, it is noteworthy that the child when born was, legally speaking, alive, its respiratory and cardiac movements continuing, indeed, for about two hours, besides which it cried faintly. Of course, as the brain was completely reduced to a pap-like mass, life, such as it was, depended entirely on the medulla oblongata; still it is well to remember that in delivery by means of cephalotripsy it is possible that the child may be born "alive," and may therefore inherit property.—*Lancet*, Nov. 3, 1888.

Tuberculosis of Ovary.

At the meeting of the Pathological Society of London, Nov. 6, 1888, Dr. Griffith showed sections of an ovary the seat of tubercular disease. It was removed by Dr. Galabin from a nullipara nineteen years old, was as large as a small apple, dense on section, and contained numerous small cysts filled with viscid fluid. Examination revealed a rather dense well-developed connective-tissue stroma infiltrated with small round cells and containing scattered spherical nodules resembling well-formed non-caseating tubercles. Each of these was bounded by circularly arranged connective tissue, which was prolonged by branching processes into the centre, which latter was occupied by a giant cell often multinuclear. There was no appearance of caseation in any part. A few newly developed bloodvessels were seen traversing the section, but they did not appear to enter the nodules; there was little if any normal ovarian stroma left. The peritoneal surface was thickened, and consisted of fibrous tissue invaded by leucocytes. The fibro-muscular wall of the Fallopian tube was expanded, the mucous membrane being thick, consisting almost entirely of tissue similar to that of the ovary, and containing but few tubercles. No microörganisms were found in the giant cells or the surrounding tissue. The tubercles all appeared to be of recent formation and rapid growth. Reference was made to the scanty literature on the subject, there being two chief forms of tubercular ovarian disease described: (1) minute miliary granulations, chiefly near and on the surface of the organ; and (2) larger caseous masses. It occurred usually as a part of a general tuberculosis. The most common seat of tubercle in the female generative organs is the Fallopian tube, then the uterus, and lastly the ovary.—*Lancet*, Nov. 10, 1888.

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CONGENITAL STENOSIS OF THE PYLORUS.

Some time ago Landerer and Mayer suggested that stenosis of the pyloric orifice of the stomach which attracts attention in adults, may be due to a congenital defect. This idea was founded upon purely theoretical considerations, and they had had no opportunity to confirm or correct it by actual observations. Since then, as is noted in the *Centralblatt für die med. Wissenschaften*, Nov. 3, 1888, Hirschsprung has found two cases which have been regarded as lending support to this theory. One was that of a well-nourished infant, who was healthy up to the tenth day, and then began to suffer with frequent vomiting and obstinate constipation. On the thirtieth day she died; and at the autopsy the lower part of the œsophagus was found to be moderately dilated, the wall of the stomach to be thickened, and the pyloric portion to be thickened and indurated and its lumen to be narrowed so that only a medium-sized probe could be passed through it. The second case was that of an ill-nourished girl, three months old, who had always suffered with vomiting, and occasionally with constipation. Death occurred, from phthisis pulmonum, when she was six months old. At the autopsy the stomach was found to be dilated and its walls hypertrophied; while the pyloric portion was much thickened, and scarcely permitted the passage through it of a lead-pencil.

These two cases are interesting as pathological curiosities; but they can hardly be considered as demonstrating the correctness of the theory spoken of above. Those who study them critically will, we think, conclude that they do not prove anything except that stenosis of the pyloric orifice of the stomach may exist at a very early age, and that it may even be congenital. This is a very different thing from the assumption that stenosis may exist for years, and all the while permit such a state of health that it shall not be suspected. For the present, the most that can be said on the subject is that it would be interesting to note carefully and systematically the condition of the pyloric orifice of the stomach in autopsies on young children, in order to determine the proportion in which stenosis occurs; and to study the history of patients in whom stenosis is diagnosticated in adult life, with a view to discovering evidence that it has already been present for a long time. Whatever may be the effect of such studies upon the theory of Landerer and Mayer, it is well for American physicians to know that it has been advanced by able and well-known observers, and to bear it in mind when cases of stenosis of the pylorus come under their notice.

SAVING THE PERINEUM.

Rupture of the perineum, its causes, frequency and methods of prevention must ever be questions of practical moment to the obstetrician. The man who in an extensive obstetric experience has never encountered rupture of the perineum is no longer regarded as a marvel of skill, but simply as a man who has failed to examine the perineum at the conclusion of labor. Olshausen distinguishes two varieties of rupture of the perineum: inevitable, occurring in spite of the greatest precautions; and avoidable. According to this authority, inevitable laceration of the perineum—not including tears of the *fourchette*—occurs in fifteen per cent. of primiparæ; and the result of his observations extending over ten years shows that laceration occurs in twenty-one and one-tenth per cent. of primiparæ, and four and seven-tenths of multiparæ. A competent critic has remarked that if such results have been obtained in his hands, the higher figure must represent the actual per cent. of inevitable lacerations, since surely all that science or art could do for these patients was done. Schrœder gives twenty-seven and seven-tenths as the per cent. of lacerations in all cases. Winckel gives twenty per cent. Charpentier quotes these and similar statistics as showing the frequency of laceration. These figures indicate the accepted opinion in Continental Europe, as to the frequency of laceration of the perineum. English obstetricians have great faith in this or that method of treatment, as preventing laceration, but fail to emphasize this belief by statistics, and at the same time admit that laceration is very common. In the American text-books the German statistics are quoted with approval. Lusk, Parvin and Busey (Amer. Syst. Obstet.) all quote Olshausen's figures in particular. We may conclude, then, that it is practically the universal belief of obstetricians, that about every fifth primipara and every twentieth multipara will inevitably suffer from laceration of the perineum in labor, aside from tears of the *fourchette*.

A discussion upon this subject was recently brought out, in the Obstetrical Society of New York, by a paper from Dr. McLean, entitled "Some Remarks on the Duties of the Modern Obstetrician" (*Amer. Journ. Obstet.*, Aug., 1888). In discussing the conduct of labor during the time that the head is distending the perineum, the writer states that he is convinced "that any so-called support which is directed to the perineum itself is worse than useless. It merely increases the danger of laceration." He believes that pressure upon the presenting part is not sufficient, though it may assist in preventing rupture by delaying the moment of maximum strain. He is "satisfied that we can do the most good by making our pressure at a point on either side of the median line, *posterior to the anus*, near the coccyx, and in such a direction that not only the presenting part is crowded toward the pubic arch, but the whole group of perineal tissues is dragged forward so as to relax them to a degree." He considers the administration of chloroform of value at this time, since it helps to relax the perineum and to control the voluntary expulsive efforts, and at the same time it safely mitigates the sufferings of the mother. Nor should the obstetrician relax his vigilance with the delivery of the head, since the shoulder or elbow of the child may plow through a part which has escaped head pressure.

Dr. Polk insisted upon the importance of securing entire delivery of the occiput from under the pubic arch before allowing complete extension to occur. In this way the sub-occipito-frontal and the sub-occipito-mental diameters engage at the vulvar orifice.

Dr. Lusk stated that "if a woman has a healthy vulva and no inflammatory condition it is always possible to guide the head through it without causing laceration of the perineum." He endorses the method of

delivery mentioned by Dr. McLean, and believes that the main thing in preventing laceration is to ensure a slow descent of the head. Upon interrogation, he reiterated his statement that if the perineum is "in a healthy condition" laceration is unnecessary, and said that when it had occurred in his practice under these conditions it was because he was in a hurry.

Neither Dr. Dudley nor Dr. Mundé believed it possible to prevent laceration always—at least it had not been in their practice. Mundé related a case in which although he succeeded in delivering the occiput without accident, yet it was not possible to prevent laceration during extension of the head.

The emphatic declaration of Dr. Lusk attracts attention. Either he has changed his mind since the publication of his treatise on obstetrics, or else it would seem that his estimate of the proportion of abnormal or unhealthy vulvæ is high. Nevertheless, we think that the promulgation of the opinion of so capable an observer, as to the value of proper treatment in preventing laceration, will do good; because just at this time there is a growing scepticism concerning the importance of any treatment looking toward the prevention of this accident.

We bring this discussion before our readers as representing the views of some of America's distinguished obstetricians, and we entirely agree that the principles and methods of treatment here laid down are the best in the majority of cases. But this is not true in cases of tedious labor, in which the head is long delayed at the pelvic outlet owing to a lack of relation between the resistance of the perineum and the propulsive forces of the mother. Here delay only favors stasis of blood in the maternal tissues, with œdema, and possibly, later on, sloughing. The life of the child is also endangered by long-continued pressure upon its head. Under these circumstances the use of the forceps is indicated not only as conserving the life of the child, but also the integrity of the tissues of the mother. Moderate traction can be made during the pains, or, in cases in which pains are absent, at regular intervals—the head being allowed to recede between the traction efforts. In this way, the perineum is gradually distended, and the child delivered with the least danger to the integrity of the maternal tissues.

LUNG SURGERY.

A very remarkable case of lung surgery was reported by Prof. Hofmokl to the K. K. Gesellschaft der Aertzte in Vienna, November 16, 1888. The patient was a man, 32 years old, who had decided symptoms of gangrene of the lungs. The seat of the gangrene was located at the back part of the right lung. A portion of one of the ribs about two and a half inches long was excised, and with the Paquelin cautery four punctures, about two inches deep, were made in the lung tissue. As no air or pus escaped, Hofmokl then made a puncture about three inches deep, from which air escaped. The wound was covered with an iodoform dressing, and Hofmokl, feeling that the operation had not been successful, expected the patient to die. But, to his great surprise, the patient at once began to mend, and before long left the hospital cured.

This interesting case may have been one —as was suggested in the discussion which followed Hofmokl's report—of putrid bronchitis; but, in any event, it cannot be doubted that the operation saved the patient from imminent death.

Such operations are nowhere very common, although they have been, and are, more frequently resorted to in Europe than in this country. This is partly due to the fact that European hospitals seem to present more occasions for desperate operations than do those of our own country, and partly to the fact that operations upon the lungs have never become the fashion here, as they have become to a certain extent

there. But it is well to note what is going on across the water, and to bear in mind the successes which have been achieved in the treatment of serious diseases of the lungs by bold and skillful operations; for no medical man can tell when a case may present itself in his own practice, when his patient's life may depend upon his knowledge of what may be undertaken for the relief of the condition present, and his courage to undertake it.

OPENING OF THE PASTEUR INSTITUTE.

The foreign medical journals bring the details of the exercises connected with opening of the Pasteur Institute in Paris, November 14, 1888. On this occasion addresses laudatory of the work of Pasteur were read, and Pasteur replied with characteristic modesty. An important part of the exercises was an address by Prof. Grancher, in which he repeated the familiar claims for Pasteur's method of inoculation for the prevention of the development of rabies, and pointed with satisfaction to the existence at this time of twenty-one institutes for the practice of Pasteur's method in various parts of the world.

We have not at hand the means of revising fully the list given by Grancher; but it is interesting to note the old symptom of inaccuracy, in his statement that a Pasteur Institute is located in a city so near and so easy to know about as Vienna. As the *Wiener med. Presse*, Nov. 18, points out, only one medical man in Vienna, Dr. Ullmann, ever practised Pasteur's inoculation on human beings, and his attempt to establish a Pasteur Institute proved an utter failure. In mentioning this fact, the *Wiener med. Presse* adds: "It is to hoped Herr Grancher is better informed in regard to the other Pasteur Institutes."

Those who share our opinon in regard to the method of Pasteur for the cure or prevention of hydrophobia, and of the way in which its general adoption has been urged upon the world, will not be surprised at any new evidence of carelessness in the arguments of his nearest defenders. So far as rabies is concerned, we expect nothing from the Pasteur Institute; although we sincerely hope that it may develop into a useful laboratory for the study of bacteriology.

TYPHOID FEVER IN DRINKING-WATER.

It is reported from Brooklyn that there is an epidemic of typhoid fever in that city, and this report has led to an explanation by Dr. Charles F. Chandler that the cases of typhoid fever are to be attributed to water drunk by the patients at a distance from the city, and that it is not attributable to the drinking of Croton or any river water. It is interesting to note this important discovery at a time when typhoid fever is prevailing in what is practically a part of New York City, in view of the well-known fact that when typhoid fever occurs in more than minimum proportions in the city of Philadelphia, our neighbors in New York rarely let slip the opportunity to charge the outbreak upon the maligned but patient Schuylkill.

PAMPHLET NOTICES.

[Any reader of the REPORTER who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

163. THE CONTAGIOUSNESS OF PHTHISIS (TUBERCULOUS PNEUMONITIS). By LAWRENCE F. FLICK, M.D., Philadelphia. From the *Transactions of the Med. Soc. of the State of Pennsylvania*, 1888. 21 pages.

163. Dr. Flick's paper is one which deserves most careful and impartial study by all who are interested in the important subject of which it treats. It contains an elaborate argument for the contagious character of tubercular phthisis, full of the evidences of painstaking research and thorough analysis. One of the most interesting portions of his address describes the results of a minute investigation of the developments of phthisis in the Fifth Ward in Philadelphia, and is accompanied with maps showing the number of cases which he has located in the different houses in this locality. To be frank, we are not convinced of the soundness of Dr Flick's conclusions, although we admire the patience and zeal with which he has worked to get at the truth in regard to the contagiousness of phthisis; and commend his excellent paper to the attention of our readers.

CORRESPONDENCE.

Prevention of Conception.

TO THE EDITOR.

Sir: Since my brief paper with the title of "Professional Cowardice" appeared in type, so many letters have come to me with reference to the same, that I am impelled once again to intrude upon your time and patience.

Two things impress me with much force, when I glance at this pile of correspondence before me, which bears post-marks ranging in longitude from Florida to California and in latitude from Canada to Mexico. The first is wholly flattering to your admirable journal, which unquestionably takes place among the very first in circulation and influence. The second is, that there can be no doubt that a larger and better knowledge concerning the sexual hygiene of the family is very generally desired.

Now when I assure your readers that a large percentage of these communications come to me in the form of appeals from physicians themselves who are over-burdened with fast-increasing families, is it not evident that a most important special branch of our art has been neglected in their education? And if medical men, with their knowledge and training, are unable to "reduce (or rather prevent) the surplus," need we be suprised that the laity are clamorous for information as to how they may limit their progeny?

Many of the letters I receive come from those outside the profession, and I am fully convinced that if I were to advertise an "infallible preventive," I might soon emerge from my present obscurity and gayly climb the stair of fame and opulence. The subject, however, is worthy of a more dignified and serious treatment than this; and if the REPORTER will allow me space I will endeavor to further the cause of morality by disclosing the method which has proved most effectual in my hands.

To begin the subject, it may be well enough to mention the various more or less fashionable methods of preventing pregnancy now in vogue. The most common is the use of the syringe, in some form or another. In Great Britain and America this method holds first place. It has a certain value, provided it is resorted to immediately after the conjugal act, and if a strong astringent is added to the menstruum, in order to destroy the spermatozoa. If, however, the sexual feeling is strong and perfectly reciprocal, as is the case where conjugal relations are normal and complete, this method is valueless; for, during the act, the womb, sensitively alive to its function, presents an open os to the impinging male organ. There is even reason to believe in a positive act of suction on the part of the cervix; hence, during the orgasm the seminal fluid finds its way directly into the cavity of the womb, where of course, the sequel is beyond the reach of any injection.

Another objection to the use of the syringe is the risk incurred in leaving a warm bed, glowing hot from the act of intercourse, to cross a cold floor, it may be in bare feet, and—as if this were not risk enough—proceeding to deluge the sensitive parts with possibly ice-cold water.

Another method that has grown in popularity of late is sometimes called "conjugal onanism." In this procedure the male organ is withdrawn just prior to ejaculation. This is effectual, and is not as a rule hurtful; but, for certain æsthetic reasons, which I have no need to particularize to the initiated, is an utter abomination. The same feeling is intensified in contemplating the *capote* or condom; and as to the various "veils," and inventions of that sort, for the female, the degree of skill required for their adjustment practically puts them out of the question.

To confess the truth, there is much in the subject to offend a refined and delicate mind, looking at the matter in as favorable a light as can be thrown upon it. It is a hateful thought that coolly calculates results, when true conjugal love demands a sacrifice. However, this is a practical age and sentiment has sometimes to be put aside or overcome; and so I will communicate to the readers of the REPORTER the method which, in my hands, has proved most satisfactory.

The appliance is a sponge, preferably a silk sponge, although a sheep's-wool sponge will do very well. There is no need to shape it in any peculiar way; the nearer it comes to the form of a ball the better. It is important to have it of a sufficient size, which will average, as a rule, one and a half cubic inches or possibly a trifle more. A strong silk thread should be passed through it and the returning loop should include enough of the sponge to prevent the thread from tearing out. The two ends must be knotted together, and, for convenience, they should be from ten to twelve inches in length.

This is all there is of the apparatus; and all that is needed for its use is that the

wife shall bear in mind that it is just as much a part of her night attire as is her *robe-de-nuit*. No skill is needed in arranging the affair. It is simply moistened and inserted a little way into the vagina; and at the needed time, it will be carried onward, covering and shielding the os uteri, while its meshes will catch and hold the seminal fluid. It is not absolutely necessary that it should be removed before morning; though, if convenient, it would be well to take this additional precaution. Here the knotted silken string will demonstrate its usefulness.

It may be suggested that this is a remarkably small mouse to result from the throes of so considerable a mountain. As to that, so much the better. The simpler and less expensive the appliance is, the better, provided the results are satisfactory; and that this will prove to be the case, I feel safe in promising.

Yours truly,

DAVID E. MATTESON, M.D.

Warsaw, N. Y.,
Nov. 29, 1888.

American Volunteer Medical Corps.

TO THE EDITOR.

Sir: Since my return home from Jacksonville, Fla., where I have been a volunteer physician for eight weeks, I have been looking over my REPORTERS that have accumulated during my absence, and I find that no mention has been made of an organization that was formed there on October 1, 1888, known as the American Volunteer Medical Corps, whose object is to be prepared to place at the service of any city afflicted with an epidemic the professional assistance of twenty-five reputable physicians who are considered experts in yellow fever.

The class of men who flock to cities when thus afflicted have always been below the standard, and knowing this from past experience we determined to make an organization that could be depended upon.

Dr. Jos. Y. Porter, of Key West, Fla., Ret. Surg. U. S. A., was elected President, with Drs. Thos. E. Broaddus, of St. Louis, Mo., and B. F. Shiftall, of Savannah, Ga., as 1st and 2d Vice-Presidents, Dr. P. H. Strausz, of Palatka, Fla., as Secretary, and Dr. L. C. Carr, of Cincinnati, Ohio, as Corresponding Secretary. Our membership is limited to twenty-five active members, and we have now fourteen. The requirements for membership are that a physician shall have passed through at least one epidemic as a *volunteer*, shall have a diploma from a regular, recognized medical college, and have a good moral character.

Knowing the progressive nature of the REPORTER, and thinking that a piece of news like this would be kindly received, I have taken the liberty of addressing you with the hope that you will give it space in your columns.

Yours truly,

PHILIP H. STRAUSZ, M.D.,
Sec. A. V. M. C.

Palatka, Fla.,
Dec. 1, 1888.

Dr. Corson's Resolutions on Hospitals for the Insane.

TO THE EDITOR.

Sir: In your issue of Dec. 1, Dr. Hiram Corson publishes the resolutions offered by him at the meeting of the Medical Society of the State of Pennsylvania in June last, with the statement that "the Publishing Committee by an unwarrantable assumption of power has excluded them from the Transactions." The resolutions in question were not "excluded" by the Publication Committee; they were simply never offered to it for publication. They might with propriety have appeared in the minutes of the meeting, but did not, as these minutes came to the Publication Committee; and the Committee has no authority to alter the minutes, either by exclusion or inclusion. Why the Secretary omitted them from the minutes, I do not know. But it may have been because they had been printed before, in the Transactions for 1886, page 36.

Yours truly,

EDWARD JACKSON, M.D.,
Chair. Publication Committee.

Philadelphia,
Dec. 8, 1888.

NOTES AND COMMENTS.

The Dosage of Chloroform.

Mr. Alex. G. R. Foulerton, in a note on the dosage of chloroform (*Lancet*, Nov. 3, 1888), says that his own rule is never to administer it at a faster rate than a drachm in five minutes; and after complete anæsthesia has been induced, the quantity necessary to maintain that state falls in inverse ratio to the length of time that the operation lasts. He believes that this rule is in accordance with the practice of most of those who are in the habit of administering chloroform to any extent.

Raising the Epiglottis by Extreme Extension of the Neck.

In a paper read before the Medical Society of London recently, Dr. Benjamin Howard described a "New and Only Way of Raising the Epiglottis." This way consists in making the utmost possible extension of the head and neck. Dr. Howard has evidently made a most thorough and scientific study of the subject, but his studies simply demonstrate conclusively what has long been known and practised empirically on this side of the Atlantic, more especially, perhaps, in Baltimore. His paper will fulfil a most useful purpose, however, by bringing the method to the notice of many who have been up to the present time in ignorance of it. Of course the most common occasion requiring the raising of the epiglottis is obstruction to the breathing during the administration of an anæsthetic.

Pyrodin: A New Antipyretic.

Dr. Dreschfeld, Professor of Pathology in Victoria University, Manchester, communicates to the *Medical Chronicle*, November, 1888, some clinical observations on pyrodin, a new antipyretic. He describes it as a white crystalline powder, very sparingly soluble in cold water; it possesses very little taste, and is, therefore, easily administered in the form of powder. After trying it in doses of eight and twelve grains for several consecutive days on healthy persons, and finding that it was easily taken and produced no ill effects, he began trying it on patients suffering with various forms of fever. The results obtained in these experiments, briefly stated, show that pyrodin is a powerful antipyretic; it reduces temperature quickly, and maintains it at a low level for some hours. It is easily taken and produces marked perspiration, but neither nausea, vomiting, nor collapse. It is especially applicable in cases of pneumonia, scarlet fever, and typhus fever. Given in small doses in the latter disease it enables the patient to pass through the fever period at a lower temperature range without delaying the crisis, and it seems also to shorten the period of convalescence. It is less applicable in cases of typhoid fever, owing to the early appearance of toxic symptoms. It appears to act equally well in migraine and neuralgia, though on this point his observations are not yet numerous enough to admit of a definite opinion. Given in frequently repeated doses at short intervals, it easily shows toxic properties, which depend on the action of the drug on the blood, producing hæmoglobinæmia. It should not be given (unless the temperature is very high) oftener than once in eighteen or twenty-four hours, and it is not safe to continue its use for more than a few days. It is found to act in cases in which the other antipyretics have failed. The dose for children is two to four grains; for adults, eight to twelve grains. It is a much more powful antipyretic than either antipyrin, antifebrin, or phenacetin, but it is also much more toxic than these bodies. This disadvantage is, however, reduced by the fact that it is rarely necessary to give more than one dose in twelve or eighteen hours, as the temperature is kept low for a longer period than if any of the other antipyretics are given. Finally, it reduces the pulse as well as the temperature, and often causes diuresis.

Ethics of Medical Journalism.

A large number of eminent members of the British Medical Association and others recently directed the attention of the President and Council of the Association to the publication in the *Journal* of the Association of a *fac-simile* of a "script" by the late Emperor of Germany, referring to his treatment by one of his medical attendants. The publication of this document they regarded as a violation of professional confidence, and its appearance in the *British Medical Journal* as discreditable to the medical profession of England. They accordingly requested the President and Council to take such immediate action as may seem to be required to clear the Association and profession from the discredit attached to them in respect to this matter.

At a special meeting called in response to the memorial just quoted, the following resolution was unanimously adopted:

"That this Council strongly deprecates the publication of any details in violation of professional confidence. The Editor of the *Journal* has given to the Council his assurance that he had reasons which he considered adequate for believing that the publication of the 'script' referred to in the protest laid before the Council was not a breach of confidence, but has expressed his regret at its publication in the *Journal*. The Council would express their own regret that, under any circumstances, that document was published."

Guild of St. Luke, Evangelist and Physician.

The purpose of this Guild, which is composed of students and practitioners of medicine, and of the clergy of the Protestant Episcopal Church, is to encourage medical students to attend religious services, and to promote and defend the Christian faith amongst members of the medical profession, both by frequent and regular communions, intercessory prayer, personal influence, and by works of mercy. It is the intention of the Guild to arrange for special services for the students, to be held on Sunday evenings at different churches in rotation. Further information with regard to the Guild may be obtained from T. Ridgway Barker, M.D., 423 S. Broad Street, Philadelphia, Secretary of the National Council.

The object of the Guild is an admirable one. Students far from home in a large city are exposed to many temptations, and are not infrequently in need of just such services as it is the avowed object of this Association to furnish.

NEWS.

—Typhoid fever is said to prevail to a considerable extent in Camden County, N. J.

—Dr. Joseph W. Howe has been appointed Consulting Surgeon to the Charity Hospital, New York.

—Dr. Henry Leffmann has been elected Pathological Chemist to the Jefferson Medical College Hospital.

—There has been another heavy frost at Jacksonville, Fla., and yellow fever is believed to be at an end.

—Dr. M. J. Reinfelder, Consulting Physician to St. John's Riverside Hospital, at Yonkers, N. Y., died Nov. 30, of heart disease.

—Measles is reported to be epidemic in Limestone, Me. Chicken-pox is also prevalent. Schools are closed, and communication with other towns has almost entirely ceased.

—The statement concerning a remarkable consultation by telegraph, which was published as a news item in the REPORTER Dec. 1, on the authority of the *Medical Record*, is a mistake, no consultation in a proper sense of the word having occurred. What actually did occur appears from a note in the *Lancet*, Dec. 1, which states that it has been "requested by Sir Donald Smith, K.C.M.G., a gentleman in London interested in the case of Lord Ennismore, to give the true version of the circumstances upon which it (the story) was based. It appears that Sir Donald Smith on Sunday, the 18th (November), asked Sir Andrew Clark, when attending him professionally, to accompany him to the Central Telegraph Station in order to assist him in interrogating the doctors in Victoria in medical charge of the patient as to his exact condition, in order that precise information might be conveyed to Lord Ennismore's family. Sir Andrew replied that he could not consent to that course, but would write down for him on paper the questions which would elicit the information he required. This was done, and in the transmission of the cablegram the name of Sir Andrew Clark was in some way inadvertently associated with the message, and the telegraph authorities on the other side used it for the purpose of concocting the story. There was therefore no 'consultation' in the proper sense of the word, the only part taken by Sir Andrew Clark in this matter being the assistance rendered by him to Sir Donald in framing the message."

HUMOR.

WHEN THE DOCTORS GIVE YOU UP, there is only one way to get well; and that is to give the doctors up.—*Fliegende Blätter.*

A SURE SIGN.—"What an intellectual couple Mr. and Mrs. Cranque are!" "Intellectual? What makes you think so?" "Why, Mrs. Cranque cuts her hair short, and Mr. Cranque lets his grow long."—*Harper's Bazar.*

DOCTOR (passing a stonecutter's yard)—"Good-morning, Mr. Jones. Hard at work, I see. I suppose you finish your gravestones as far as 'In Memory of' and then wait for someone to die, eh?" Stonecutter—"Why, yes; unless somebody's sick and your doctoring 'em; then I keep right on."—*Chambers' Journal.*

AMBIGUOUS ANATOMY.—Scene: Pharmacy. Enter an elderly female to whose husband some of our "Kill-Pain Liniment" has been supplied. Chemist: Well, Bridget, is Michael better? Mary: Deed he's not thin, dochter avic. I rubbed in yer medicine, but he got no betther, so oi brought him to Vincint's this morning, and Dochter McArdle, the jewel, ses he has an abyss in his slumberin' verterbrin, near his spinal columns.—*Chemist and Druggist.*

THE

MEDICAL AND SURGICAL REPORTER

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Clinical Lecture.

ANTERIOR URETHROTOMY FOR GLEET.

BY EDWARD L. KEYES, M.D.,

PROFESSOR OF GENITO URINARY SURGERY, SYPHILOLOGY AND DERMATOLOGY IN BELLEVUE HOSPITAL MEDICAL COLLEGE, NEW YORK.

Gentlemen: Anterior urethrotomy, especially for the treatment of gleet, is the subject which we will consider to-day. There will be little time to devote to the cases operated upon a week ago—hydrocele and phimosis—for the subject of anterior urethrotomy is veiled in so great obscurity, there is such marked difference of opinion regarding its indications, that an hour will prove too short more than to mention the disputed points. The operation itself is a trifling matter; it is very simple to perform, but when to resort to it is a question of more difficult solution.

First, however, I will present you the young man on whom I operated last week for varicocele. He had no trouble after the operation; no medicine was administered. He simply lay abed four or five days, and the result has been perfect. He is practically cured; the scrotal veins will no longer serve as broad receptacles for undue quantities of blood. In my judgment this man required but one ligature around the veins returning from the testicle. Some cases require as many as three ligatures, one near the inguinal canal, another near the globus major, and a third underneath the globus minor. Twisted silk should be employed, disinfected, and tied as tightly as your strength will permit. This case is a practical demonstration of the moderate amount of reaction which follows the operation. Frequently there is more exudation and inflammatory deposit about where the vein has been tied, the tumor amounting in size at times to that of an English walnut. But it does not suppurate. I have seen but one case in which suppuration resulted among probably a hundred operated on, and in that one the ligature came away. In another there was some serous exudation for a few days, but it did not go on to suppuration.

We will now pass to the subject for our especial consideration to-day, and presumably we have an illustrative case before us, although I have not yet had opportunity to examine the man. The subject is that of internal urethrotomy for anterior stricture of large calibre, not of small calibre. It has become customary to speak of urethral symptoms, or symptoms having their origin in the urethra, as if they were diseases. Now, a symptom manifesting itself from the urethra is no more a disease than a symptom in any other part of the body. If someone whose friend had a cough should ask you what is good for a cough, you would answer that there is no such disease as cough. But if another man whose friend had a gleet should ask what is good for a gleet, you would, according to the modern method, reply that he should have his strictures cut. It has become the practice in cases of gleet to liberate the urethra of any tight points or narrowings in its course with the view of thereby curing the gleet. But in my opinion such teaching and practice are not sound. You might as well say that the proper treatment of cough is the use of cod liver oil, or of iodide of potassium, going

South, etc. There is no such disease as cough, and there is, truly speaking, no such disease as gleet. A man may have a chronic urethral discharge, called gleet, due to a tuberculous condition of the kidneys, or disease of the seminal vesicles, or prostatic disturbance, etc., and the mistake be made of dividing certain narrowings of the urethral canal which are altogether physiological for the cure of the gleet. These narrowings are found: at the orifice; within a third of an inch of the orifice, the distance varying somewhat with the variations in the size of the penis (this is sometimes called the false meatus); another distant between two and four inches from the orifice; another at the bulbo-membranous junction. In other words, the urethra is narrow at the meatus, then large, then narrow, then large, then narrow, and again large. It seems to me the reason for these narrowings is physiological. The orifice is narrowed in order that the individual may be able to throw a smooth stream, not a scattering one, and clear itself. Inside of the smaller orifice there is a sinus which corresponds to the expansion of the glans penis, and is found wherever there is much erectile tissue about the canal. Then the urethra is narrower until between the second and third inch from the orifice, when it becomes further narrowed; after which the sinus of the bulb is reached. Here the canal is surrounded by the greatest amount of erectile tissue, and a distinct pouch exists, the object of which is to catch the last few drops of urine expelled from the bladder at the close of micturition. The spasmodic contraction of all the muscles which bear upon the sinus of the bulb forces these last drops outward, clearing the meatus in a fine jet. The levator ani, the perinei, the pyramidal, the circular muscles in the membranous portion of the urethra, all act in clearing the canal of the last drops. In doing this a wave of blood passes along the corpus spongiosum from behind forward, and is noticeable in the expansion of the glans during erection; when the organ is flaccid it is not observable.

You have before you a person with gleet; you are aware this may be due to various causes. On passing a bulbous sound along the urethra a narrowing is felt at certain points in the pendulous portion, already noted, and the question will arise, Shall you cut or not? You may cut the constricted points if you choose. It is the fashion now to do so. It is alleged by some to be the proper treatment of gleet to relieve the urethra of points of contraction, and to make the canal of uniform calibre throughout as far down as the membranous portion. That this results in the cure of a certain number of cases of gleet is unquestionably true, the reason being that many gleets depend upon a granular condition of the urethra which requires for its cure pressure, and this cannot be exerted by means of the sound between narrowed points. If, then, granulations exist in the canal, requiring pressure for their cure, and the orifice is found small, divide it, and then if there be disproportionate narrowing in the pendulous urethra, divide that also, that you may be able to pass a sound of sufficient size to make the desirable amount of pressure; for the greater the pressure in such cases the more rapid will be the cure. Pathological narrowing may exist in the pendulous urethra caused by traumatism, peri-urethral abscess, follicular inflammation, long-continued granular condition, or other inflammatory state; and when present such strictures should be fully divided, after having first rendered the canal anæsthetic with cocaine. But if you find your patient has simply a moderate amount of contraction in the second or third inch of the canal, it will not be necessary or desirable in the majority of instances to use the urethrotome. Such routine surgery is objectionable, and is based on an imperfect conception of the origin of many gleety discharges. I wish to state this fact very forcibly, for I scarcely ever get a patient with a gleety discharge which has existed a year or more (and I see a great many of them from New York and distant points) without his having already been cut in the pendulous urethra two, four, or, as in one case, eleven times; yet the muco-purulent discharge has not been cured. Therefore I repeat that it is a great error to suppose that the narrowing which exists in the pendulous portion of the urethra is always the cause of the gleet from which the patient may suffer. So to regard it, and adopt the knife as routine practice, brings surgery into disrepute among the laity, and it is among the laity that we must maintain a reputation for integrity and correct practice. The routine practice of dividing narrow points in the urethra for gleet is to be likened to the conduct of the plowman who read in a magazine how to write a successful story. Thinking it would be a good thing to write a successful story, he followed the rules given; but his story did not prove a success, and he asked an equally stupid friend how to account for it. The reply

was that he probably had not used the right kind of ink.

Try to discover the origin of the gleet, and locate the trouble which is the cause of its continuation. Sometimes you will be able to do this, sometimes you will not. The case before us may enable us to bring out some diagnostic points. I have not yet examined him, but he is said to have gleet. I am further told that he has a narrowing in the anterior urethra, and the question has arisen whether to cut it; and if the answer is affirmative, why? The operation itself, should it be determined upon, will occupy very few minutes.

I requested my assistant to collect the patient's urine, have it passed in two parts, the first passed collected in one glass graduate, and the last part in another by itself. But this has not been done, for the patient has just passed his water. Consequently I shall now be unable to demonstrate the point which I had intended to do, and which is necessary in making an exact diagnosis. It is a most extraordinary fact that a man will come all the way from Rochester or San Francisco to be examined for a urinary trouble, and perhaps be obliged to return by the next train; yet just before reaching the doctor's office (and being perhaps unduly nervous), he will go around a corner or to some water-closet and pass his urine. Having emptied his bladder, the doctor cannot obtain a specimen of his urine, and is unable to make a diagnosis or to treat the case thoroughly. If the patient has time he may return again, or sit in the office a couple of hours until his kidneys have time to secrete more urine, otherwise one valuable diagnostic point may be lost.

After waiting for some minutes, this patient has been able to urinate again, and has passed more than an ounce of water in one vessel and a less quantity toward the close of the act in a second vessel. The first portion washed the urethra, is muddy in consistency, looking like cider or mutton-broth or chicken-tea. This color signifies that it is mixed with some solid substance which renders it more or less opaque. The part passed last is clear. If a man comes to you and passes such urine as this which has washed the canal, while the last part is clear, you may conclude that his trouble lies in the urethra anterior to the neck of the bladder. Why? Because if the pus formed in the vesical neck or above it, some of it would collect in the bladder, and pus coming from the kidneys or bladder is mixed with the whole amount of urine, so that that passed last is as perturbed as the first.

We may safely say, then, that the cause of this man's gleet is either in the anterior urethra or in the grip of the membranous urethra, and does not involve the prostatic sinus.

A second point relates to the shreds contained in the urine, for a man with moderate gleet always passes shreds. They look like tufts of cotton floating about in the urine, or else like long, thin filaments. When of the former character they come from the deep urethra, and when of the latter character generally from the anterior urethra. In this case we find some relatively broad while others are relatively long.

If there is considerable secretion of pus, say one drop to be found most of the time at the meatus, and another ready to be squeezed out, it may all come from the anterior urethra. If a man says he has only a little gleet, sufficient to gum over the meatus, without staining the shirt, the focus of disease may be the deep urethra, some of the pus remaining in the canal to be washed out with each flow of urine. In such case the chunky shreds in the urine will preponderate over the linear shreds and there may be more or less free pus. If the patient forms one drop of pus an hour in the anterior urethra it will be sufficient to stain the shirt, and if this amount is formed and the shirt is not stained it is because the secretion comes from the deep urethra, and remains in the prostatic sinus or flows backward into the bladder, and then to cut the anterior narrowing in the canal will not relieve the gleet.

When a man comes to you with gleet, ask him how often he passes water. If not oftener than five or six times a day it is normal. No perfectly healthy young man gets up habitually to pass water at night. Of course he may do so occasionally, as after drinking excessively of fluids, or awake with a priapism and rise to urinate to relieve it. This patient says he passes water five or six times a day and once at night. I venture to say that if he passes water regularly once at night he has an irritation in the deep urethra, which would correspond with the chunky shreds which we find in the urine first passed. If he urinates once at night he probably does so oftener than five times a day, say eight or more times.

Thus far we have obtained circumstantial evidence that our patient has a gleety discharge, the origin of which is in the deep urethra and some of it in the anterior urethra as well. But we will examine him

with the sound to learn whether there is not also difficulty in the anterior urethra. Since he has just washed out his urethra by urination, any pus lying in the anterior urethra must lie there as a soft scab upon a granular surface, and this may be scraped away upon the shoulder of a bulbous sound. His meatus being rather small, we can introduce a bulbar instrument of hardly sufficient size, and it will be better to substitute the urethrameter of Dr. Otis, which can be turned up after passing the meatus to form a bulb. Pass the instrument down into the sinus of the bulb. Screw it up until the patient is sensible of the pressure. Then withdraw it gently screwing it down as it reaches the narrowed areas. On withdrawal it will bring away a clot of pus, often tinged with blood if the narrowed areas are also in a granular condition. If that is the case you have corroborative evidence of the filament of pus found in the first urine passed. But if the bulb comes away clean, without either pus or blood stain, the patient does not show undue sensitiveness at the points of narrowing in the pendulous urethra, and the shreds contained in the first urine passed are not long and filamentous, but chunky, you may conclude that the discharge comes from deeper down, and that division of the anterior narrowing will not cure it.

Of diagnostic importance is a microscopical examination of the shreds passed with the first urine. The chunky shreds, which come from the posterior urethra contain besides pus cells, ovals cells which are from the deep portion of the urethra and the neck of the bladder, and the whole is bound together by a colloid material. Sometimes casts of the prostatic ducts are present, amylaceous corpuscles, perhaps spermatozoa.

Regarding the measurements of the penis and urethra, the rule given by Dr. Otis to determine their relative size is a good one; I know of none better, but I do not agree with him as to the necessity for making the urethra of uniform size throughout. When it is necessary to perform internal urethrotomy you may cut safely to the limit which Dr. Otis's rule calls for, and sometimes it will even be necessary to cut more deeply in order to divide all the constricting fibres. But many people get well of a gleet without having the canal brought up to the size alleged to be called for by the circumference of the penis, and indeed many people go through life with considerable narrowings of the urethra without any symptoms referable to the penis. Dr. Weir has examined the urethra in cases of fœtuses removed from the womb of the mother, and found contractions at the orifice and in the pendulous portion. Such contractions must, then, be physiological. Dr. Weir also took casts of the urethra in the normal and in the diseased state, by injecting plaster or wax into the canal and after it had hardened cutting it out, and in all instances the canal was found to be somewhat like the trachea, composed of small rings, more marked anteriorly and in the middle portion. You can divide the urethra internally up to any point you choose, until a sound will pass in and out perfectly smoothly, encountering no obstruction, yet when you pass the bulbous sound, one a little larger than the ordinary sound which goes smoothly down, you will find it give the sensation as if the canal were ribbed.

I once yielded to the solicitations of a young man who suffered from all sorts of neurotic disturbances to divide his urethra on a number of occasions, but never got to the point where the bulbous sound in passing down would not bump over points of apparently fibrous structure. Finally I concluded these operations had been carried far enough, and refused to do any more cutting, but he insisted that there was a constriction which needed to be divided, and being asked how he assured himself of it, he said he could feel it, and taking out his penis he opened the orifice, put his finger into it, and said "here it is!"

Recently the ribbed condition of the urethral canal has been demonstrated beyond peradventure by the aero-urethroscope of Antal. A urethroscope is an instrument through which one can look into the urethra, and an aero-urethroscope is one which combines distension of the canal with air. By its aid one can see the semicircles and circles of fibrous material which are present as far as vision extends. The aero-urethroscope further demonstrates the normal contractions to which we have alluded.

In view of the fact that this man's urine contains some filamentous shreds, indicating that they come from the pendulous portion of the canal, that there is sensitiveness at the narrowing posterior to the glans, facts pointing to some inflammation at that point aside from that which evidently exists in the deeper urethra, and that the bulb comes out stained with both pus and blood, we will divide the narrowing in the pendulous urethra, and also enlarge the meatus to enable us to pass the sound. The deeper urethral trouble must receive attention later.

After cutting, the parts need not be disturbed for three or four days, and after that the sound should be introduced down to the membranous urethra, but not through it, twice a week. Some deep injections will probably be required in this case before complete recovery will take place.

COMMUNICATIONS.

TRAUMATIC GANGRENE.[1]

BY THOMAS H. MANLEY, M.D.,
NEW YORK.

Mr. President and Fellows: I am led to present an article on traumatic gangrene because it has been my fortune, during the past few years, to see in and out of hospital many genuine cases of this disorder; and while there has been nothing unusual which each case assumed, it may not be without interest to record four or five of them, and afterward dwell on the causes, consequences, and treatment of mortification. In doing so I shall aim rather to be plain and practical than to offer too much theory and speculation.

The discussion of this phase of disintegration cannot fail to be of great interest to the general practitioner, as well as to the surgeon; especially the former, who often is compelled to decide questions of saving life or limb, without the opportunity of consulting with the experienced surgeon.

Traumatic or moist gangrene of a limb is rarely seen in general practice, and very seldom in a well-conducted hospital. Usually when a limb is so crushed or mangled that saving it appears impossible, the spontaneous destruction of the part is frequently anticipated by amputation or excision; and besides, nowadays, wounds and injuries are for the most part so intelligently treated, that death of a part seldom occurs. Hence, the reason why this rare and peculiar sequel of a wound may, by its insidious development and often very rapid course, escape the notice of the medical attendant until it is too late to spare a limb, which might otherwise have been saved.

When it is found, however, that inflammation has ceased and mortification begun, we are confronted with a most serious question, namely, the question of amputation *while gangrene is in a spreading state.* To its consideration, later on, I shall request your attention; for on its wise and judicious settlement will depend, perhaps, not only the life of the patient, but also his future usefulness. I am pleased to be able to report four or five typical cases which have recently come under my immediate care. They are of much interest, for each one presents phases of gangrene seldom met with, and, I believe, little understood, even to-day.

My first patient was a middle-aged man, mortally bitten by a rattlesnake. He was brought in by the ambulance, to Ninety-ninth Street Hospital, at midnight on June 12, 1885. During the evening of that day he had been exhibiting his reptiles in one of our parks. After supper, according to the announcement, he gave a performance in his tent, which consisted in calling the snakes out of their cages and putting them through various movements. While doing this, one which he had teased with his whip suddenly turned, and with a vicious snap sunk his fangs deeply into his trainer's forearm. The unfortunate fellow, who was a vigorous and muscular man, became faint and dizzy; he sat down, and tried to get up, but fell on his knees. He soon had chills, with cold extremities, and his strength entirely gave way. Whiskey was administered in large quantities and heat applied to the extremities. During this appalling collapse, his mental faculties remained intact, and, though he could neither speak nor move, it was apparent that the mind was unclouded. At this time his pulse was 130, the features sunken and of a peculiar cadaverous expression, the pupils dilated, and the eye of a bright, unnatural lustre. Such is the report of the case, as given me by Dr. G. E. Spaulding, our estimable House-Surgeon, at that time on duty.

The case was first seen by me the following morning, when all hope of saving the injured arm was abandoned. At this time the forearm that was bitten, and all the tissues up to the shoulder, were dead to sensation and immensely swollen; the skin was of a yellowish-gray color, the finger-nails black, and the whole limb immovable. In the immediate vicinity of the puncture, there was an area of marble whiteness about the size of a half-dollar. The man was evidently sinking, and as the infection had extended beyond the shoulder-joint nothing could be hoped for from amputation, even if he would survive the shock of operation. From his admission into hospital, nothing was neglected that

[1] Read before the New York State Medical Association, Oct. 10, 1888.

would sustain his strength. Alcoholic stimulants were freely given with ammonia, camphor, and opium, but without avail; he died in the morning at 10 A. M., eleven hours after his admission.

This case demonstrates how rapidly gangrene from the bite of a venomous reptile may spread. Within six hours after the infliction of the bite, the whole arm, including the shoulder, was in a state of sphacelus—thoroughly dead, dark, and withered; there were blebs on the skin, scattered about from the finger-tips upward. The skin was denuded here and there, where it happened to be rubbed in handling; the whole arm emitted a foul, sickening odor. A most painful feature in the case was that, while death was rapidly creeping on and the limb was rapidly decomposing, the mind was untouched, and the poor fellow was anxious that his life might be spared.

It seemed to me that, with appropriate measures applied promptly on the reception of the injury, this man's life might have been saved: if the bitten part had been freely dissected out, allowed to bleed, and thoroughly cauterized with the hot iron, before the poison had been diffused into and through adjacent tissues, paralyzing the nerves and destroying the circulation. It was sometime, however, before an ambulance was called; then the poison had entered the general circulation and little could be done. A *post-mortem* could not be obtained.

My second patient, though he got off with his life, had to part with an arm. This case also illustrates the speedy onset of gangrene, and the sudden transition of inflammation to mortification, and what may be sacrificed by oversight or even a few hours' delay.

The man was 38 years old, a tinsmith by trade, living a regular life; he never dissipated nor abused himself, but was generally in good health. He lived in a tenement house, the first floor of which was occupied as a butcher's shop.

On a very hot night in July last year, he left his bed at about midnight, in his night-clothes, and went to the window to make himself more comfortable. The window-sill was quite near the floor.

He only intended to get a little fresh air, to cool off and then return to his room; but, overcome by the weariness following upon a day's hard toil, he was soon asleep. How long he slumbered he hardly knew, but it must have been some hours, for it was dawn when he was discovered. While asleep, it seems, he shuffled about in his chair, lost his balance, and went out through the window. He first struck on the awning, and was awakened by the fall. He then rolled over and over, quickly gliding toward the flags below; but in the course of his rapid descent, his right arm, at the flexure of the elbow, on the inner side, was transfixed by one of a row of butcher's hooks, which tore up all the tissues to the bone, and was only arrested at the wrist by the tough ligamentous tissues which form that joint. Here he hung suspended for nearly half an hour, when his loud shrieks brought an officer, who released him from his perilous position.

On examination of the wound, on his admission to the Harlem Hospital, by Dr. Lewis, the House-Surgeon, there was very little hemorrhage, though the brachial artery was torn completely across just below where it emerges from under the bicipital fascia. The hand was quite cold, with no evidence of circulation. The wound was immediately dressed, beginning with the ligation of the large artery, and thoroughly irrigating the furrow in the tissues. Drainage tubes were inserted and the wound closed from end to end with cat-gut sutures. Iodoform was freely sprinkled over the dressing; Gamgee absorbent dressings were applied, and the whole supported, and heat maintained, with hot bottles.

I saw the patient for the first time six hours after the injury, when I carefully examined the fingers, the only parts exposed, and found that the circulation was fairly re-established.

There was little swelling at this time, and though the hot water bottles had been some time removed, natural heat was yet there. The patient said he had his usual feeling in the hand, complained but little of pain, and looked well.

He passed a quiet, uneventful day. His pulse at mid-day was only a little accelerated, and, with a good collateral circulation, it seemed, after all, that he might soon recover without any serious detriment to the use of his arm.

The morning dressings were undisturbed, and things allowed to remain as they were. Toward evening, the temperature suddenly went up, and he became thirsty and restless. The thumb and fingers underwent considerable swelling and increase in heat, and he complained of severe pain along the course of the wound, extending into the fingers. It was now evident that collapse had passed away, and re-action set in, and that nature was attempting restoration. I had antici-

pated this at my morning visit, and directed the House-Surgeon, if there were much swelling, to release the sutures and loosen the dressings, which he did, much to the relief of the sufferer. As day passed into night, he became more and more uneasy, continually complaining of a severe burning pain extending from the hand to the elbow. His pulse, at midnight, was a hundred and thirty beats to the minute, hard and bounding, and the thirst persistent.

With the advent of early day, he slept three hours, and felt much more comfortable. There was, however, great bodily weakness, so that he could hardly move in bed. In going through the wards, at about 11 o'clock, I was much surprised at this man's changed appearance, and concluded at once that the wound was not doing well, though the House-Surgeon assured me that, two hours before, everything appeared to be progressing favorably. The patient, strange to say, said he felt first-rate. He was immediately removed to the surgery, where an examination was made. The fingers, hand, and arm, to and above the elbow, were found stone-cold, discolored, puffed, and boggy—in fact, all the tissues here were dead and becoming gangrenous. The scalpel could be plunged in anywhere, up to within six or eight inches of the shoulder, without evoking the slightest sensation. The dividing line between the living and dead tissues, though not visible to the eye, could be more or less defined by the circulation and sensation. Up to the insertion of the deltoid muscle, the parts were quite devoid of life, but at this point there was a striking difference in the color and consistence of the blood let out on incision.

Now, we had before us a case of great gravity, one which emphasizes what I said in the beginning of this paper, of the insidious and treacherous nature of this disease, and the serious developments which may follow in a wound, even under the most intelligent treatment. Here, too, came up that question, At what stage is operative interference justifiable? Shall we wait for nature to separate the healthy from the diseased, or shall we take time by the forelock, and do that by art which nature only tediously and imperfectly performs?

In the present case it seemed to me that gangrenous infiltration was rapidly spreading upward, and that if it were allowed to creep but a few inches further, and involve the shoulder-joint, relief by operation would be impossible. Consent having been given to amputate, ether was given, and the limb removed at the shoulder-joint. I shall later on describe more fully the condition of the parts at the time of cutting. The patient made a good recovery, the wound healing by primary union; he left the hospital in good health, six weeks after his admission.

My third case, like the second, well illustrates the imperative necessity, at times, of amputating while gangrene is spreading, and teaches besides the important lesson that a comparatively trifling injury may, if not properly treated, end in loss of a limb, or even of life.

The patient was a man forty years old, in sound health, by occupation an engineer. On January 12, 1888, while ascending an elevator, he had the big toe of the right foot crushed between the sill of a door and the platform of the elevator. A practitioner in the neighborhood was called in and removed the nail, which was partly detached, and the third phalanx, taking his flap from the under surface of the toe and bringing it forward to the point at which the bone was disarticulated; the dressing was with all antiseptic details. A week after the accident, I was invited by the wife to see the case, but declined, except with the regular attendant. A few days later, a consultation was held, when it was decided to remove the third phalanx of the adjoining toe. As this operation was followed by the same torturing pain, and the man could neither eat nor sleep much, and was daily losing flesh, his wife insisted that I must see her husband. The surgeon in attendance consented. This was three weeks after the injury. It was about noon when I saw the case in consultation for the first time. At first sight it seemed to me that the foot was surely doomed. It was immensely swollen on the inner side, œdematous and cold. On critically examining the parts I found more or less warmth in the three outer toes, and in the external portion of the foot. I advised immediate amputation of the affected parts, which was done one hour later. All the phalanges of the big and middle toes and their metatarsal bones were found necrosed, the fleshy parts were broken down, disintegrated, and soaked in a sero-purulent liquid of vile odor.

The most difficult feature in the operation was to decide exactly how far to cut, in order not to include contaminated tissues. We gave the patient the benefit of the doubt, and removed as little as possible. Though we used no tourniquet, we had little hemorrhage. This, I feared, was a bad omen, as we all know how extremely vascu-

lar this region of the body is. The morning after amputation the doctor and I saw him together. At this time the remaining part of the foot looked anything but encouraging. Large blebs had formed on the dorsum of the foot; the swelling remained, and what was left of the foot was rather numb to the touch. As the people were rather poor, and the apartment not the healthiest, it was decided to send him to hospital. Accordingly, the same day he was admitted into one of my wards in the Harlem Hospital. I immediately sent for Professor F. S. Dennis, one of the Visiting Surgeons, for his advice in the case. He responded promptly, and at 5 P. M. he, with Dr. John G. Truax, saw the case with me, and advised delay and waiting for further developments. The rapid recovery of the part was amazing. It healed quickly and compactly by granulation, and the patient returned to work just six weeks from the time of entrance to hospital, with a fairly useful foot; and now, though he is a little stiff in his gait, there is scarcely any lameness perceptible.

The fourth case was that of a young German twenty years old, admitted into Harlem Hospital June 2, 1888. His horse had taken fright, and he was thrown from a wagon against an iron support of the Elevated Railroad. When picked up, it was found that he had sustained a compound fracture of the lower third of the radius, with a compound dislocation outward of the articulating ends of the radius and ulna at the wrist joint. On admission to hospital he was suffering considerably from shock. The parts were thoroughly cleansed, irrigated with sublimate solution, the displaced bones reduced, the surface of the wound dusted with iodoform, the Gamgee dressings applied, and the whole supported by suitable splints.

Prof. Dennis, who had charge of the case in its early stages, saw it for the first time, June 3, the second day after the patient's admission. By his direction drainage tubes were inserted, and the most thorough antiseptic treatment instituted. On the third day after admission, he began to complain of pain, the ulnar side of the hand seemed to become cooler, and the skin was of a rather suspicious color. June 6, the fourth day after admission, the hand showed unmistakable evidence of gangrene. The ulnar side of the wrist and hand, and the four fingers on the corresponding side were much swollen and destitute of sensation. His appetite, however, remained good and he slept well. June 9, the date on which I first saw the wound, and resumed charge of the surgery at the hospital, the whole hand from the finger-tips was more or less mortified, with patches here and there, where it seemed some vitality remained. A large slough occupied the palmar surfaces of the hand, extending deeply into the carpal bones. The opening through which the bones protruded had not closed, and their bare denuded ends could be plainly seen. It seemed at first sight that notwithstanding the slight evidence of life remaining in the thumb and index finger, that the only safe and expeditious way to proceed would be to amputate the whole hand. As it would appear that gangrene, having involved all the carpal bones, and the fleshy tissues being in a sloughy state, nothing short of this would suffice.

From my success, however, with my preceding cases, in operating while gangrene was spreading, I decided to try and save the thumb and first finger. When we operated, we found all the phalanges of the three outer fingers, with their metacarpal bones, and all the carpal bones in advanced necrosis. The ends of the radius and ulna were also necrosed and deprived of their periosteum. Everything of a suspicious character was removed; but the thumb and finger were spared.

The process of disintegration here was so rapid and thorough, that one would think the retained members very soon must have shared the same fate as those which were removed.

The wound was treated on general surgical principles and by keeping the arm in a well-padded zinc splint, hollowed out and extending from the end of the finger and thumb to the elbow. The wound healed kindly, though the skin on the preserved members peeled off in the course of recovery. He left the hospital one month after entering it; the wound was well healed, and he had fair use of the thumb and finger.

I ask your attention to my fifth and last case for a few moments because there was a feature in it peculiar to itself, and of very much importance. A youth seven years old, while playing on a coal-car that was in motion, fell to the ground; the wheels passed over the right lower limb obliquely, tearing the skin completely off from the knee to the ankle, and, crushing through the bones of the latter, left the foot hanging by a few torn tendons. When reached by the Ambulance Surgeon, Dr. Curry, he had

bled profusely, and was in a state of shock. He was admitted into the Harlem Hospital on September 3—in fact, since I commenced this paper. Nothing was done with the mutilated limb until the following day, except to secure the vessels and apply dressings. On the second day after his admission he had recovered from shock and the profound collapse, but had a very feeble pulse. The foot was separated from the leg by snipping off the tendons with the scissors; the leg was then again cleansed and bound up. Nothing further was done for five days, except to give the patient stimulants and nourishment, with a view of getting him in condition for operation.

It was now thought that, with the bare ends of the tibia and fibula exposed, the superficial tissues of the limb in a state of slough up to the knee, and his condition fair, though yet with a weak trembling pulse, we might make him more comfortable and rid him of the offending members by an amputation above the knee. The limb might have been removed lower down, but then there would have been no integuments for a flap.

The question to decide was, When to amputate, with reasonable safety? my own experience being that very young children do not tolerate amputations well. At this time, the exposed tissues had begun to granulate, the only one of the five cases in which this occurred; the line of demarcation was well defined, commencing in an oblique circular form just above the patella, and embracing the entire limb. At the borders of this narrow chasm, the position and consistence of the parts were most interesting to study. On the necrosed side the tissues had a gray, charred appearance; they were withered and shrunken, and, as time had allowed the aqueous elements to evaporate, the slough had become dry and tough. On the other hand, the sound side of this ridge looked remarkably healthy and in striking contrast with the parts undergoing dissolution.

A flap was formed by detaching and turning back the skin at the healthy limit, and removing but a very thin shaving from the border, with a view of securing primary union. The femur was divided about two and one-half inches above the knee joint. After amputation the flaps were sutured, drainage tubes used, and the stump put up in the usual dressings. Not more than a drachm of blood was lost. It was more than four hours before the patient regained consciousness, and he remained very feeble, never really rallying from the operation, and died the following day, about thirty hours from the time he reached his bed. The amputated limb was carefully examined and found sound down to the protruding ends of the bones. I saw no object in trying to save the limb when it was entirely denuded of integuments; and skin grafting, which forms at best but a sort of cicatricial tissue, is almost useless as a covering to a movable joint like the knee.

Such was the melancholy ending of my last case. The child's life, I am confident, should have been saved, and I committed the fatal error of cutting before the recuperative powers were fully established. Everything was to be gained by waiting even a month, and nothing lost; but it is always easy to be wise after the mistake is made. It taught me a valuable lesson, however, and I would warn my brethren of the great danger of operating while the vital processes are at a low ebb. With reference to the foregoing cases, I would respectfully call your attention to the varieties of traumatic gangrene, and to its causes, consequences, and treatment.

In the beginning, moist gangrene must be divided into two kinds, the spreading and the non-spreading—that in which the limit of death is sharply and accurately defined by a dividing line, in a very short time after violence is sustained. But it must be admitted that this dividing line is no criterion as to the depth of mortification. The first kind is that in which the line of demarcation is wanting or not well marked, which I have chosen to designate the spreading, inasmuch as the gangrene starts from an insignificant injury or very limited solution of continuity, and extends rapidly from the periphery toward the body.

The causes of gangrene are obscure in many instances. Pathology has done little to clear the way to a better understanding of morbid process in gangrene; and, after all, we have to lean on our own experience for guidance in treatment.

Sometimes its development is unavoidable. We cannot predict how extensive or destructive an injury will be. No one can explain why a trivial hurt in one case leads to most serious consequences, while in another the extent of mutilation is alarming, and yet the limb recovers perfectly, with little or no constitutional disturbance, and no loss of function. This is the mystery which it seems all time will never reveal.

Inflammation is the most active factor in the production of moist gangrene. In all

my recorded cases except one there was active inflammation preceding mortification. In only one, in which the toxic irritant was immediately applied, the limb succumbed with the diffusion of the poison, which seemed to multiply in intensity in its progress. The laceration or obliteration of a large blood-vessel contributes its share toward the destruction of a part by cutting off its nutrition; but that this alone will lead to gangrene in a healthy person, I am inclined to doubt.

We all know that there is scarcely a single vessel in the body which may not be closed by the ligature without the peripheral parts being in the least endangered. Even in one case of gangrene of the ulnar side of the hand here reported, it would be hardly rational to suppose that even if the entire ulnar artery were destroyed, it alone would occasion mortification; as we all know that the collateral circulation in the forearm is good, and besides, there is the freest kind of anastomosis between the ramifications of the radial and ulnar arteries, in the superficial and deep palmar arches.

Injury to a nerve may be transmitted to a large trunk, and from there affect a large area; and it is entirely reasonable that a nerve filament may undergo death, and then in turn all the distant parts supplied by the common trunk share the same fate.

We may have gangrene of various extent, and sometimes its course is remarkably fickle and erratic; as when it destroys the skin only, without affecting the subjacent tissues, and when it destroys the latter and spares the former. Blocking of the blood-vessels will not explain this; so that we must look to a deranged or interrupted nerve-supply to account for it. Excessive or improperly adjusted pressure, and neglect or ignorance of wound treatment, are often responsible for gangrene.

We now come to its treatment, and this is the part of the subject in which I am especially interested. It may be divided into preventive, conservative, and operative; with the latter I am chiefly concerned. For prevention, use measures which will subdue inflammation. The modern enthusiast in antiseptics would have us believe that these, when rigorously applied, render inflammation impossible. If we should unconditionally subscribe to this doctrine, then it would be idle to discuss other means of relief; but there are some skeptics among us who are not quite ready to throw aside remedies which have stood the test of centuries.

Cleanliness, soothing applications—warm or cold, according to the comfort they give—rest, good fresh air, with light wholesome diet, contribute toward a favorable issue. Drugs are not to be despised. The best are those which allay pain and those which act specifically in subduing inflammation. For the latter purpose mercury has no equal, either applied locally in the sublimate douche, or given internally.

Of course, if I believed in the natural tendency of disease to recover, I could not consistently advise any drugs; but I believe this do-nothing theory has cut short many valuable lives; that disease never comes except to destroy; and that our province is to apply our art so as to limit or arrest the progress of the disease.

If inflammation will develop in a case of gangrene in spite of our efforts to control it, we may often modify its violence by free blood-letting in the vicinity of the congested parts, either by free incisions or punctures, the bleeding to be encouraged by warm, moist applications.

If inflammation terminates in mortification, what are we to do? When is interference by the knife justifiable? Shall we do by art that which nature very slowly accomplishes? Is it hardly conceivable that the attendant will stand idly by and see a limb slowly but steadily perishing, the deadly process propagating itself upward toward the vitals? Shall we amputate in spreading gangrene? These are questions which may be forced on the practitioner at any time; for it must be borne in mind that an extensive mortification may arise from a simple wound under certain circumstances which may involve the loss of a limb.

Among the great surgeons of the early part of the present century there was much difference of opinion about the propriety of amputating while gangrene is in a progressive state. Sir Astley Cooper gave the great weight of his authority to the side which advised delay till more or less detachment of the diseased from the living tissues was evident. On the other hand, both the world-renowned military surgeon, Baron Larrey, and Mr. Guthrie, gave the most cogent and convincing reasons for immediate interference.

Larrey said: "That in cases of mortification arising from external injuries, notwithstanding what practitioners or writers may say to the contrary, we should not hesitate about promptly performing an amputation as soon as the necessity of doing the operation is established. There is no reason to

apprehend that the stump will be seized with gangrene, as in the spontaneous variety which has not ceased to spread, because the traumatic mortification, after having arisen from a local cause, is only propagated by absorption, and a successive affection of the textures of the parts by continuity of vessels. Amputation performed in a proper situation arrests the progress and fatal consequences of the disorder."

We must be positively assured that a limb is actually gangrenous before we resort to cutting. This can usually be easily determined by its condition, the absence of circulation, the discoloration and puffiness of the skin, and above all by its icy coldness—that state of the tissues in which Dupuytren proved by experiments that the temperature, for some inexplicable reason, is lower than in the dead body.

The exact point or locality at which to enter with the knife when we have decided to amputate—where to sever the parts so as to get rid of the defunct and spare the living—is to the inexperienced a very difficult matter to decide. To the conscientious surgeon, as well as to the unfortunate patient, it is a most serious affair; as we all know the inestimable value to the wage-earner, not only of a limb, but of every joint, no matter how small. On theoretical grounds, we should take no chances, but go well beyond the suspected tissues. My experience, however, has taught me to be extremely conservative, and include in the flap even some of the tainted part, rather than go too far up into sound tissues, especially when a joint is involved.

In my case of mortification of the whole arm, in consequence of external violence, and which was successfully amputated at the shoulder joint, the skin of the limb was greenish and livid, but high up the cuticle was not detached. The cellular substance was distended with air and a discolored sanies; and its appearance was not quite natural when the incision was made. It was yellowish and anasarcous; small effusions of blood were observed here and there along the course of the nerves as high as the point of amputation. All the soft parts were discolored and livid, and a frothy reddish fluid issued on incision.

As this case had a most favorable termination, it clearly proves that humid gangrene in the healthy subject from severe local injury, which so rapidly affects a whole limb and reaches the trunk in a few hours, must constitute an exception to the older maxim: "that amputation must never be performed till the line of demarcation is well defined."

To sum up, it will be noticed, in the first place, that all the patients were males; that there was a local *rot* without a general infection in all except one. The first case was most remarkable for the swift and appalling virulence, and almost immediately lethal action of the bite of the snake. In the second, though collateral circulation was established after the ligation of the brachial artery, mortification quickly supervened, and was abruptly arrested in its march by carrying the knife through the invaded tissues. The third case illustrates what a serious condition may arise from a trifling injury; while the fourth shows that we should use all our endeavors to save every inch of tissue which shows the least spark of life. The fifth case was lost, I believe, through acting without the deliberate judgment by which the surgeon should be influenced in every extensive operation.

CASE OF ANTHRAX.

BY WILLIAM N. FERGUSON, M.D.,
PHILADELPHIA.

I desire to call attention to a most deadly malady, rarely seen and recognized in practice, but one to whose virulent contagion many workmen in our large cities are sometimes exposed. This disease is anthrax.

The patient, F. N., was a "picker" in a manufactory of hair and bristles, who was exposed to the dust of the machine-picker as it separated the bundles of hair. A slight abrasion on his neck, supposed by him to be caused by the rubbing of a high collar, became the open door to the entrance of the poison. Friday, November 23, he felt unable to attend to his work; he had headache, chill, general malaise. His neck began to swell at the seat of the abrasion. He gradually became worse, and on Sunday morning at 8 o'clock he sent for medical advice. I was at once struck with the enormous size of his neck and the depressing effect the disease had already produced on a man of evidently strong physique.

On closer examination I found, on the right side of his neck, about an inch above the clavicle and on the posterior border of the sterno-cleido-mastoid muscle, a spot about one-half inch in length by one-fourth in width and concave on its upper surface; the centre of this area was occupied by skin thrown into a number of puckered folds,

markedly yellow beneath. Around this spot was a sharply defined area, brilliant rose-red in color, and about one-sixteenth inch in width; there was no hardening to be felt. From this spot the brawny swelling had progressed as though all the tissues of the neck were infiltrated with serum; it was not erysipelatous in appearance. His general look was that of a man stricken with a fatal disease; the pulse was feeble and frequent; respiration impaired by pressure on the air passages.

The treatment ordered was a large flaxseed poultice to the neck, and internally a mixture of chlorate of potassium and tincture of the chloride of iron, with stimulants.

Six hours afterward I was sent for hurriedly and found the patient had been having severe attacks of dyspnœa, and that he was in a state of collapse, with ice-cold extremities and no radial pulse. The swelling in the neck had increased to such a degree that the right shoulder began to enlarge. The patient was oonscious but complained only of increased paroxysmal dyspnœa. Hot bottles to the feet and legs with a mustard plaster to the præcordial region were applied, and a consultation was requested.

Half an hour afterward Dr. H. A. Kelly met me in consultation in the case and concurred fully in the diagnosis of anthrax.

Carbonate of ammonium and whiskey were prescribed to stimulate the circulation, but the patient rapidly sank and died about 6 o'clock, ten hours after I had first seen him, and sixty hours after the local inoculation.

His occupation as a worker in hair and bristles, the rapid and enormous infiltration of the tissues, the constitutional symptoms, and the sudden collapse in a strong robust man, to my mind made a clear diagnosis of a case of anthrax.

—Dr. John R. Frayser, whom the *Memphis Med. Monthly* calls the "Nestor of Memphis Medicine," died in that city Oct. 26. He was born in Cumberland Co., Virginia, in 1815, and was graduated from the University of Pennsylvania in 1834.

—On account of ill-health, Dr. William A. Edwards, Instructor in Clinical Medicine in the University of Pennsylvania, has been obliged to leave Philadelphia, and will shortly remove to Southern California. He has had charge of the ward bedside instruction in the University for the past eight years.

ASPIRATION OF CEPHALHÆMATOMA.

BY F. H. PATTON, M.D.,
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The following case seems to me of some interest as illustrating the advisability of performing an early aspiration for the relief of cephalhæmatoma resulting from violence.

My son R., aged 15, fell from a 56-in. bicycle on his head, August 7, 1888. I saw him almost immediately. He was entirely unconscious from shock, and remained so for an hour or more. There was immediately after the fall a large hard swelling with contusion of scalp over the coronal suture on the right side and a blood tumor with clearly defined edges over the left parietal bone, but no contusion of the scalp here. The boy made about the ordinary favorable recovery from severe concussion, but was in a state of hebetude, with headache and some vomiting, for several days.

The point of interest in the case was the very rare cephalhæmatoma. In this case the blood was probably beneath the pericranium, as the tumor was circumscribed from the first and bounded by the sutures of the parietal bone. There was a diversity of opinion among my professional friends who saw the case, as to treatment. All agreed to wait a week or ten days for evidence of absorption. After the lapse of ten days with no diminution in the size of the tumor, aspiration was discussed. It is surprising how indefinite authors are as to aspiration in such cases. Nancrede in Ashhurst's Encyclopedia says: "If the swelling persists, aspiration may become necessary." Wyeth does not mention aspiration as treatment, except when a serous cyst results. I might mention others as unsatisfactory. At the expiration of twelve days the tumor, in my son's case, was aspirated, and ten fluid drachms of blood were removed. A firm compress was applied over the seat of the tumor for seventy-two hours, when all the remaining fluid had been absorbed, and there was no further trouble with the tumor. In a similar case, I should aspirate sooner. Under proper precautions there is scarcely any danger of carrying septic matter or air into a tumor of this character, and I certainly should prefer this chance to anxiously awaiting the result of the slow process of absorption, with the constant dread of suppuration or the formation of a cyst.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, November 28, 1888.

The President, J. Solis-Cohen, M.D., in the Chair.

Dr. William Hunt read a paper on

Diabetic Gangrene,

in which he first referred to the vast literature devoted to diabetes and the singular fact that the references to gangrene in connection with it are very meagre. The best studies of diabetic gangrene are to be found in French, especially prior to 1868. Peyrot reports 39 cases and there are 101 cases in current French literature, most of them in the *Union Médicale*. Dr. Hunt gave a brief account of ten of these cases, most of which were in males, and among which mental causes were common. He then spoke of the valuable paper of Marchal, who reports 133 cases, of all sorts. Gangrene *per se* occurred in 57 of these 133 cases.

Dr. Hunt does not think that diabetic gangrene starts from an injury; and as regards microbes, he thinks that, in gangrene as in other diseases, they are to be found where disintegration of tissue provides the proper soil for them. König's paper on this subject was mentioned, and his conclusion that amputation should be performed when, in spite of antiseptic and anti-diabetic treatment, the patients grow worse.

Dr. Hunt then spoke of the scanty references to the subject to be found in text-books, even in systematic works on surgery, both in this country and in England, and regretted that it had received so little attention. To determine if possible how many cases of diabetic gangrene had been seen in this city, in which examination of the urine had been made and the result recorded, he sent out three inquiries to those whom he supposed most likely to meet with the disease.

In reply to his first inquiry whether or not the observer had noticed gangrene in connection with diabetes, he received thirty answers. Seven observers had seen no cases, and twenty-five reported a total of sixty-three cases. The age of the patients was usually above 50 years, though one case was noted in a young man 19 years old. The sexes were about equally affected—24 women and 25 men. The most common seat of the gangrene was in the lower extremity below the knee.

The second inquiry concerned the relation between diabetes and phthisis, and whether or not gangrene of the lung had been noted in diabetic patients. The answers to this question showed that most observers could not demonstrate correlation of the diseases from their own experience. Dr. Tyson, however, had noted eight cases of phthisis in 55 diabetic patients. Dr. Agnew had met with one case of gangrene of the lung. Dr. J. C. Wilson had also seen one. Dr. Osler had had two patients die of phthisis and one with gangrene of the lung. Only eleven deaths were attributed to phthisis in 143 cases of diabetes, including those from Dr. Hunt's practice. Dr. Hunt thought this result noteworthy. He then referred to the statements bearing upon the relation of diabetes to phthisis to be found in the books of Roberts, Fagge, Flint, and other authors, among them Blau, whose summary of the literature of the subject in *Schmidt's Jahrbücher*, Oct., 1888, was specially mentioned.

In stating his own opinion, Dr. Hunt said that he believed many cases in which phthisis coexisted with diabetes were cases in which the diabetes had supervened upon the phthisis. In his experience the cause of death in diabetics was other than phthisis—coma, œdema of the lungs, or exhaustion.

As to the social condition of the patients, he said that most of his cases were in wealthy people. In age they were for the most part above fifty years. He had noted in several cases a remarkably low specific gravity: in one case 1.010.

In regard to the character of the gangrene met with in diabetics, he said it was usually moist, but in hard tissue it was dry and like that known as senile gangrene; the different varieties depending on the character of the tissues involved.

A point in the differential diagnosis between diabetic and senile gangrene is that in the former there is never, or at most very rarely, a good line of demarcation between the healthy and diseased tissues; while in senile gangrene such a line is usual.

Dr. Hunt then stated that he had been called in January, 1885, to see a wealthy gentleman 76 years old, who was in an attack of apoplexy. He recovered from this attack, but remained a chronic semi-paralytic. On Jan. 9, 1888, he was again called to see the patient and found him comatose, with flushed face, temperature 103°, pulse 120, and with Cheyne-Stokes respiration. There was evidently effusion of fluid in the brain, and pressure upon the respiratory

centre. The interesting point in the case is that sugar now appeared in the urine—from pressure upon the diabetic centre in the fourth ventricle.

Dr. Hunt also referred to a case in which he was called to a patient and found him in deep coma; his respirations 60, pulse 150, and sugar in his urine. The respiration could be stopped by exciting a reflex such as the stomach reflex. Death occurred in two hours from cessation of breathing. He also referred briefly to a case in which he believed a patient had died from acute diabetic gangrene; but in this case the urine either was not examined, or no record of the examination was kept.

Regarding the frequency of diabetic gangrene, Dr. Hunt expressed the opinion that it was second only to the traumatic variety. It is a disease of the wealthy and not of the poor, and in nature seems to be related more to gout than to phthisis. He believes a diabetic drunkard to be rare, and is inclined to ascribe diabetes to overeating with deficient exercise: "Excess in food clogs; excess in drink crazes." He thinks the vaso-motor system must be affected in this disease, and instances in proof of this the well-known fact that impotence is common in men affected with diabetes.

Dr. Thomas G. Morton, in opening the discussion, read a brief account of thirteen cases occurring in his practice. In his cases the disease as usual affected most frequently the lower extremity below the knee. In illustration of the rarity of the disease among the poorer classes, he instanced the fact that among 20,000 patients in the hospitals for the insane in Pennsylvania not a single case is reported.

Dr. Morton said he had known the disease to follow a slight operation, such as the cutting of a corn. As regards the surgical treatment of diabetic gangrene, he thought it should be palliative; in most cases the disease is promptly fatal. In some cases it may be arrested by free incisions. In two of his cases there was very acute pain, and in these he had given relief to the suffering by cutting the nerves supplying the parts.

Dr. John Ashhurst, Jr., stated that all are familiar with the fact that diabetes is a cause of certain gangrenous affections, and that certain injuries, such as that of the floor of the fourth ventricle, give rise to diabetes—or, to speak more accurately, to glycosuria. In these cases the condition of the urine varies very markedly; sometimes the quantity of sugar present is very large; sometimes it is very small. Indeed the quantity may be so small that its presence escapes detection altogether.

He had seen but one case in which diabetes was recognized as a predisposing cause of gangrene. This was a case of strangulated hernia, in a man in middle age, who had long been a diabetic. The incarceration was five or six days old, and when he operated the bowel was found to be gangrenous in one patch. He made an artificial anus, and very soon after the operation the whole region of the wound became progressively gangrenous, and death followed.

He referred to the fact that gangrene is often precipitated in diabetics by trifling injuries, such as cutting a corn.

The fact that the gangrene of diabetes is usually moist rather than dry is of value when a question of diagnosis arises. We believe that alcoholism is a not infrequent cause of diabetic gangrene, and in many cases of spontaneous gangrene in diabetics we must attribute this to alcoholism rather than to the diabetes.

He called attention to the fact that it is not very uncommon to have spontaneous gangrene in certain forms of Bright's disease, while a granular kidney diabetes may be present and not be recognized.

In regard to the treatment of diabetic gangrene, Dr. Ashhurst said, the less done locally, the better. He would advise not only waiting until the line of demarcation formed, but waiting for a line of separation, which sometimes does not form until weeks after the gangrene begins. No operation should be undertaken until this period, and then the surgeon should merely trim off the parts ready to separate, with scissors and forceps, rather than undertake a formal amputation. Constitutional treatment is of the greatest importance. The remedy most useful in diabetic gangrene is one which is of the greatest service in diabetes, namely, opium; and it is also a remedy very valuable in traumatic gangrene. His own practice is to give one grain of opium, night and morning.

Dr. James Tyson thinks diabetic gangrene must be a very rare disease, for among 55 cases which he has notes of since 1884, he has not met with a single case.

In answer to the question whether or not he had seen a case like that reported by Dr. Hunt, in which diabetes followed effusion and pressure upon the medulla, he said he had not met one just like it, but mentioned a case in which a wealthy man, 56 years old, who had been under his care three years for diabetes, became hemiplegic. On the

appearance of the hemiplegia the diabetes disappeared, and has not reappeared for two years. Sugar in this case was frequently present to the extent of from 2 to 5 per cent., and on one occasion rose to 7 per cent.

As bearing out what had been said as to the social condition of diabetics, he said that in the Philadelphia Hospital, where there are one thousand beds, he was frequently unable for weeks at a time to find a case of diabetes to lecture on. Dr. Tyson has noted extreme pain in one case of diabetes in which there was also granular kidney.

Dr. James Darrach reported one case, which had been already referred to by Dr. Hunt, and stated that he had at one time examined a large number of aged persons to determine whether or not sugar in the urine of such persons is usual. He distinctly asserts that it is not usual.

Dr. Darrach also suggested that the condition of the arteries found in some cases of gangrene might itself be a stage of gangrene. He said that in shingles the skin supplied by peripheral terminations of the sensitive nerves was gangrenous, from a depraved condition of the nerves.

Dr. S. W. Gross said that he could see no direct connection between diabetes and gangrene; the former is only a predisposing cause of the latter, just as weak heart and arterio-sclerosis are. He called attention to the age of the patients in whom diabetes occurs in illustration of the assertion that arterio-sclerosis is frequently present; in such cases traumatism occurs and is followed by inflammation and gangrene. He reported a case bearing out this pathology. With regard to König's recommendation to amputate when the patient persistently grew worse in spite of proper medicinal treatment, he said the after-history of two of König's cases justified his advice; for in one case 24 hours after amputation, and in another 4 days after, the sugar disappeared from the urine and did not return. Dr. Gross favors operative interference under the circumstances mentioned by König.

Dr. Osler thinks that Dr. Hunt has underrated rather than overrated the frequency of pulmonary complications in diabetes. He referred to Frerichs' monograph on diabetes, in which the author states that one-half of the four hundred cases upon which his work is based died of pulmonary affections. The latter are grouped by Frerichs as: 1. Gangrene. 2. Bronchopneumonia. 3. Tuberculosis. The first is referred to arterio-sclerosis as the cause.

Dr. J. William White, in illustration of the importance of estimating the associate disorders which may exist in a case of diabetes, mentioned a case of Dr. Agnew's (mentioned by Dr. Hunt), in which there were profound changes in the blood-vessels.

Dr. S. Solis Cohen said that it was the custom at the Medical Dispensary of the Jefferson Hospital to examine the urine of every patient, regardless of his symptoms. These examinations seem to Dr. Cohen to indicate that diabetes is not so rare a disease among the poorer classes as it is commonly supposed to be.

Dr. DeForest Willard cautioned against operative interference.

Dr. Ashhurst said that he thought the degree of pain met with in gangrene depends upon the rapidity of death of the part: when the death is slow there is much pain, but when death is rapid there is usually little pain.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, December 6, 1888.

The President, A. Jacobi, M.D., in the Chair.

Dr. A. L. Loomis was nominated for the office of President by Dr. A. Jacobi. The latter declined a renomination.

Dr. J. R. Leaming read a paper entitled:

Acoustics Applied to the Human Chest in Physical Diagnosis,

in which he said that it was not until the laws of light were studied in relation to the eye that ophthalmology became a true science. There is a law of acoustics which, when applied to the air chamber of the chest, will place the diagnosis of diseases of the organs within on a scientific basis. This practical age of the application of the laws of sound to the telegraph, phonograph, etc., makes it easy to apply acoustic law to the chest in diagnosis. Dr. Leaming considered the different facts involved in this subject, beginning with a brief statement of the laws governing sound, the most important of which, in this connection, are that sound consists of vibrations of the air; a greater number than seventeen hundred vibrations a second is not appreciated by the human ear; and fewer than thirty-two a second give the impression of distinct sounds. He described the chest as a chamber whose walls are lined with a dense elastic smooth membrane, and closed at the base by the diaphragm. It is a perfect acoustic

chamber which can be enlarged or contracted, and its power increased or diminished with the speed of thought. While a most perfect instrument for the formation and reflection of sound waves, it is liable to alteration by disease and its acoustic qualities to change. It also contains the lungs, tubes, and heart, which interfere with its acoustic qualities. The heart and lungs accomplish their work with sound, and to these the auscultator must attribute due importance. The arrangement of the tubes and sacs in the lungs also constitutes an acoustic instrument, but of a different kind from that of the chest chamber. Each sac is a resonator distended with air constantly rarefied by heat, and upon this air the sac constantly contracts, causing vibrations which help to make up the vibrations of the respiratory murmur. Sound waves also pass in from the open air and are consonated in each sac, as are also the friction vibrations of the tidal air rushing in and out through the open bronchi.

Speaking of acoustic laws as applied to the heart the author said he had become further convinced of the correctness of the view expressed by him twenty years ago regarding the origin of the first sound of the heart. It is formed by the vibrations of the tense mitral valve, by the tense chordæ, the sound of muscular contraction, and the friction of the blood.

Regarding stethoscopes, he said there is none better than Camman's binaural instrument; but for accuracy and delicacy, and least likelihood of getting out of order, nothing equals the application of the temporal bone of the head to the resonant body; the most sensitive point of this bone is in front of, and just above, the external ear.

The paper was discussed by Dr. A. L. Loomis, who thought it could not be more finished as it related to the principles of acoustics in diagnosis of diseases of the chest; but it had brought the subject down to the practical application of those principles and left it there to be carried farther by each hearer. Dr. Loomis regards four qualities of sound as of everyday use to the diagnostician—pitch, quality, duration, and rhythm. He fully agrees with Dr. Leaming regarding the importance of cardiac rhythm, slight alterations of which being often of greater significance than murmurs without change in rhythm. He has never been able to separate what Dr. Leaming had referred to as the consonant resonance of the sacs from the other elements of the respiratory murmur.

Foreign Correspondence.

JOTTINGS FROM AROUND THE WORLD.

Curative Influences of a Long Ocean Voyage.—Victoria Eye and Ear Hospital.—Scrofulous Arthritis.—Conservative Surgery.—Operations for Hernia.—Antisepsis.

Melbourne, Oct. 25, 1888.

The curative effects of ocean climate in certain cases of sickness are now becoming better known each year. Dr. William S. Wilson, of England, has done much in his writings to make the ocean better appreciated as a health resort.

One of the essential points in obtaining the full benefit of the sea trip is to make it long enough. Now our transatlantic steamers make the trip from New York to England in about a week, and this is far too short a time to get the constitutional changes to be hoped for in an ocean climate. The trip to the South Seas can now be made with comfort, and through the finest of climates; the novelty and this constant diversion are factors not to be forgotten. Someone has said that the north Atlantic is the stormiest water in all the world; many of us have had the experience of this, and moreover, it is almost always cold; the winds with icy breath blowing down from the Borean regions chill one even in midsummer. But if one should travel over the southern route of the Southern Pacific Railroad to San Francisco, then take the steamer from there here, he would have one long extended summer all the way to Melbourne. Start when you please from the American metropolis of the Pacific; it is not cold, and be it July or January, the climate of the Pacific Ocean, from the enchanting Hawaiian Islands down through the dreamy softness of the Samoan group, on to the everlasting springtime of Northern New Zealand, even to the southern coast of Australia at Melbourne, will permit one long continued life in the air and sunshine. Surely this must be the future ocean trip of the invalid. One is scarcely embarked for Europe before he finds himself steaming up the Channel; here, day in and day out for weeks, he can draw in the ozone, every atom of the body feeling the good influence; here are new regions for him to see, new peoples to meet, new fish to catch in the waters, new stars to watch in the heavens. May I urge my medical brothers to give attention to the claims of the glorious Pacific as a health resort? The heat of the tropics during the few days that it requires

to cross that region is not so oppressive as is often imagined. I have seen many a hotter term in Philadelphia. To dress or almost to undress in light and cool clothing, lie lazily under the canvas deck-covers, and simply breathe, doze, and dream away the day is to a hard-worked man a state of bliss; and as evening in these regions comes on, almost always the air is delightfully cool, and often a light wrap is not amiss.

From my personal experiences I can say that this prolonged ocean trip is a God-send to those troubled with insomnia. My own sleep soon amounted to fifteen or twenty hours a day; and oh! what rest, away from all noise, in an air so pure and sweet, with that delightful salty smell which used to refresh me so much on nearing Atlantic City on a hot summer afternoon! How many days did I promise myself that I would certainly do some reading and some writing, and would sit down on my steamer-chair on deck, only to find myself an hour afterward just emerging from a nap, my note-book rolling about the deck, and my lead-pencil overboard riding the waves of the blue Pacific. My dear doctor, have it as a treat in store to make this trip among the islands of the South Seas. Now, speaking entirely from the experience I have gained from my own trip and from the conversations I have had with both patients and physicians who have made the same voyage, there are some diseases which seem to be especially benefited by a long ocean voyage; among these are: 1. Early consumption — during the premonitory stage; in these cases the utmost advantage is to be gained, often complete cure, and always arrest of the progress of the disease. But *when cavities are forming do not send* the patient. 2. Bronchial troubles are helped by getting the patient away from the severe winters of the north and giving him a long summer in the tropics or sub-tropics; such a person on coming to land should not go to Melbourne to reside, but should select a drier place, some part of New South Wales, or as far north as Queensland, more under the tropics. 3. For the after-effects of an attack of pneumonia, where there is a little hardening remaining, or the general health has been left below par, this is just the trip; the pure air, the rest, the increased appetite, all conduce toward making a most complete cure. I have been disappointed so far in seeing much relief to the unfortunate asthmatic. I am prepared to assert that the nervous man or woman will find a long sea trip of the utmost benefit; if he or she has been disappointed in a European trip I do not wonder; but this voyage lasting weeks, and steaming, or perhaps better yet, sailing in and out among these islands, can not fail to make an impression for good if there is the slightest chance for any improvement. In such cases we get all the factors of a sea life to combine in doing their good offices for the weakened nervous system—rest, change, different mode of life, the breaking up of bad customs, getting out of one's self, the cheer, the social surroundings—all are so favorable. This is not theory; one need only go on such a journey to see many a patient day by day improve and make rapid advances toward health.

What has been said applies also to those cases classified as debility—the overworked professional man or merchant, the young girl who has overtaxed her strength, the languid, anemic girl or boy, the patient with amenorrhœa—all these patients are sure to improve.

I have just returned from the Victorian Eye and Ear Hospital of Melbourne. This hospital was founded in the year 1866 by A. S. Gray, M.R.C.S., Eng., who is the senior surgeon at the present time. It was my good fortune to find this genial Irish gentleman making his morning rounds, and I received a hearty welcome and an invitation to visit the wards with him. During the last year the hospital has received 406 in-patients, and treated 17,132 out-patients; the number of operations has amounted to 858. It is the only hospital of the kind in the colony of Victoria, and many of the patients are from the country districts. Mr. Gray expressed regret that the students did not take more advantage of this rich clinic: this morning there was not one in attendance; sometimes there are a dozen or so, but student-like, attendance is small unless it is compulsory. This institution receives some support from the Government, but the most of the funds are from private sources.

The surgical staff consists of two Honorary Surgeons and one Honorary Assistant Surgeon. Mr. Gray has been elected a life surgeon, in recognition of his being the founder of the institution. The other surgeons are elected for ten years, and the assistant for five years. One hundred and eleven cataracts were operated on during the year. Of all the operations performed only ten were on the ear. The standard treatment for purulent ophthalmia is with five or ten grain solution of nitrate of silver. Mr. Gray said that if he saw the patient early enough he never lost an eye under his

treatment. I was struck with the primitive way the drops were put into the eyes of the patients: a common quill cut square was dipped into the solution, and then carried to the eye and a few drops allowed to trickle in between the lids. Many of the little wrinkles so well known in America are not used here. American adhesive plaster of the newer kinds is much used and greatly liked; the Doctor expressed his great indebtedness to "you Yankees" for this kind of plaster.

I trust that my many remarks against the clinical service will not be construed as derogatory to the skillfulness of the clinicians. In this eye service, for example, the masterly hand of a well-drilled and thorough practitioner was shown at every move, and by every remark made concerning the case in hand. I do not propose to allow myself to fall into the error of praising without reserve everything met with simply because it is foreign; and on the other hand I want to steer clear of as great an error of condemning everything simply because it is foreign.

In referring to the statistics of blindness, it is found that Victoria has a good record, for while Portugal is said to have the greatest number of blind to each 10,000 persons living—21.90—New Zealand has the least, only 2.82; and then comes Victoria with 8.60.

During a visit to the Melbourne Hospital when Mr. Ryan was on duty, I saw a very interesting case of complete (scrofulous) degeneration of the wrist in a man 30 years old. The entire structure was soft and broken down; the operation proposed was resection, and if this did not prove successful, then amputation, one or the other of these being the only thing which could be done. Mr. Ryan has been successful in a number of cases of resection in such conditions in getting a fair hand left; only a short time ago, in a case which in his judgment admitted of amputation only, he was forced into resection by the wishes of the family; the result was most gratifying, the amount of usefulness and the entire progress of the case being such as to teach the importance of conservative surgery. On this very account the next case coming under treatment had been given the advantage of a chance. The man had a hand terribly crushed; a trip-hammer had fallen on it and mashed it out of all recognition as a hand; but we saw the hand almost healed, with two fingers left, so that it will be of use to the man in many ways. We then saw a healthy looking wound following an operation for strangulated femoral hernia. A young woman 20 years old was engaged in exercising with dumb-bells and Indian clubs, when she became faint; this was followed by vomiting, pain, and other symptoms indicating strangulation of the bowel. The free application of ice and mild taxis not being attended with any results, an operation was done within twenty hours, and an exceedingly tight stricture was found, with the sac in the liveliest state of congestion. Doubtless if the operation had been delayed only a few hours the result would have been quite different. It is not often that a medical man can feel quite as sure as the operator in this instance was that he has snatched a case from the grave. The great point in Mr. Ryan's practice is, in all those cases in which it is a question of operation or death, to operate early. Of the 18 patients he has operated on for strangulated hernia since last May he has lost but one, and this was an old man of 70, very feeble and partly paralyzed.

I find extreme antiseptic notions are not held here. Mr. Ryan was a pupil and a clerk of the famous Lister, yet he has dropped the rigid rules of the system called after his great master.

The spray is only used when the abdomen is to be opened, and then it is only allowed to play in the room for a time before the hour appointed for the operation. Bichloride is freely used as a wash and for the usual antiseptic purposes; iodoform dusted from a pepper-box is used *ad libitum*.

The walls of the hospital wards are of brick and painted with silica paint, which permits of free washing and hard scrubbing; the floor is of wood and well waxed; a good circulation of air is obtained, and, take it all in all, they seem to get about the same results as those who never operate without making the fearful onslaughts on the bugs which are supposed to hang about the operating-room as sea-gulls after a ship, waiting for some delicate morsel to feed upon. Ryan admits that Listerism has done much good in causing surgeons to be more careful in the ordinary laws of cleanliness. As far as I can learn, not a surgeon in Melbourne practises extreme Listerism.

C. C. VANDERBECK.

—The sanitarium at Youngstown, Ohio, was entirely destroyed by fire on Dec. 12. Eight patients were carried from the burning building on cots. The fire was caused by the combustion of natural gas.

LETTER FROM BERLIN.

Treatment of Poisoning with Carbonic Oxide.—Poisoning with Sulphonal.—Pulverized Sugar as a Remedy in Diphtheria.—A New Peptone.—Death of Prof. H. Von Bamberger.—A Princely Physician.

BERLIN, Nov. 30, 1888.

With the return of cold weather the unsightly German earthen-ware stove comes into use, and cases of grave poisoning with carbonic oxide are recorded in all parts of the empire.

Paul Guttmann, the well-known Chief of the *Moabit Krankenhaus*, has just delivered an interesting clinical lecture on the subject, which your correspondent has taken down in short-hand for the MEDICAL AND SURGICAL REPORTER. The following *résumé* contains the more important parts of the lecture. Two young girls were brought to the *Moabit Krankenhaus*, poisoned with carbonic oxide. They had forgotten to open the valve of the treacherous *Kachelofen* (earthen-ware stove). One girl was dead beyond hope of resuscitation, and the other one was in a state of profound coma. There was no reaction on irritation of the cornea, nor on powerful electrical irritation. Respiration was difficult and so irregular that its stoppage was looked for every moment. The cardiac beat was small and frequent. The patient was conveyed to the Hospital at 7 o'clock A. M., and was immediately placed in a large and airy hall, where artificial respiration was begun and persisted in up to 4 o'clock P. M. When no signs of recovery had appeared by that time, and injections of ether and Faradization had proved equally useless, transfusion of defibrinated blood was resorted to. An assistant physician offered his cephalic vein and six ounces of defibrinated blood were injected into the patient's vein. But even this measure did not prove successful. The girl remained in the same condition for two days and a half. Then œdema of the glottis set in and necessitated tracheotomy, which was followed, however, by death. The girl had been in deep coma altogether for eighty-two hours. The blood showed after death the well-known cherry-red color. Guttmann has observed ten cases of carbonic oxide poisoning within the last nine years; six of the patients recovered, including two whose illness was grave. As to the interesting question whether or not transfusion of blood is of value in this intoxication, Guttmann has always held that the usefulness of the procedure is very limited on account of the naturally scanty quantity of blood which can be transfused. He believes that fresh air is by far the most important and most reliable remedial agent. Experimental researches have also demonstrated that carbonized blood when shaken up with oxygen, or even with atmospheric air, soon regains its normal color.

Prof. Fürbringer, Chief of the Friedrichshain Hospital, who has observed six cases of this intoxication, made some interesting remarks on the subject. Death, he said, ensues not so much from decomposition of the blood, as from the action of the poisoned blood on other organs. He fears the sequelæ of the poisoning more than the poisoning itself. Another interesting question is as to the cause of œdema of the glottis. It is now known that this complication does not arise from the action of the carbonic oxide, but from the irritation caused by the products of dry distillation which are produced by the burning objects.

Sulphonal, the now fashionable hypnotic, is the subject of very varied professional opinion. Some extol it, others condemn it. The truth probably lies, as usually happens, between the extreme statements. Sulphonal has a clearly defined usefulness, and belongs not so much to the class of narcotic agents, which produce sleep by stupefaction, as to the remedies which assist the natural periodical desire for sleep. The new drug is, however, by no means so harmless as has been hitherto asserted by its manufacturers. Dr. Bornemann has just reported a case of severe poisoning resulting from the administration of the drug. The patient, to whom sulphonal was given for insomnia caused by cerebral excitement, was a physician. The result was a pronounced intoxication showing very complicated symptoms. There was a distinct interference of co-ordination, first in the lower and later in the upper extremities. He could not, for instance, raise a cup of coffee. A very prominent feature of the poisoning was his perverted feelings and illusions. The patient believed he had two heads, four feet and arms, etc.; or he believed he was on a boat or in a railway-car, and that someone was about to kill him. These illusions may be termed reflectory. The ataxia referred to is a central one, as it remained unchanged no matter whether the eyes were opened or closed. This distinction between central and sensory ataxia has been made by Prof. Mendel. The drug did not exert any unfavorable influence over the heart and circulation, which appears opposed to the warning of

Dr. Schmey not to use sulphonal in angina pectoris and arterio-sclerosis.

There is just now great barrenness in the therapeutical novelty bazaars. Not a single new antipyretic, anæsthetic, or hypnotic has been discovered for some time. So it is well nigh time that something new should turn up, even if it is only a new use for an old friend, such as pulverized sugar, which Dr. Lorey, of Frankfurt-on-the-Main, considers the best remedy in diphtheria in existence. American physicians no longer put any faith in therapeutical recommendations coming from abroad. True, in the case of pulverized sugar the first requisite of a remedy—*ne noceat*—is well fulfilled. Dr. Lorey, who has used this remedy for nearly a year in numerous cases, is emphatic in declaring pulverized sugar the most satisfactory remedy in diphtheria. He refers to the indications of diphtheria as established by Prof. Oertel, of Munich, viz., to favor the disintegration of the false membrane and to induce copious suppuration. Both indications, Lorey says, are fulfilled by finely pulverized sugar in the most satifactory manner. The remedy is applied with an ordinary hand-ball insufflator. The sugar is blown over the tonsils, pharyngeal wall and posterior nasal cavity. After tracheotomy the sugar is of course blown through the canula. Dr. Lorey gives the following results of eighty observations of the treatment of diphtheria with pulverized sugar: 1. The duration and extent of the diphtheritic deposit are materially lessened by the application of sugar. 2. The bad odor frequently observed is not noticeable when sugar is used. 3. The mucous membranes of the tonsils and pharynx appear fresher and more highly vitalized. The membranes are lifted up and a copious mucous secretion takes place. 4. The cough is suppressed.

The favorable influence of sugar on granulations has long been known, and sugar has, therefore, often been incorporated into dressing materials of wounds. It is also said to have an analgesic and antiseptic effect. The entrance of finely pulverized sugar into the folds of the mucous membrane causes a current of juices toward the surface in order to effect the solution of the sugar. Thus bacteria are probably carried to the surface and are there rendered harmless, either by the concentrated solution of sugar or by the generation of hostile bacilli. The usual constitutional treatment of diphtheria is of course to be observed. Dr. Lorey uses also small doses of apomorphine, and iron as a tonic after the acute stage has passed.

Prof. Fürbringer has introduced to the profession a new peptone manufactured by de Weyer, of Brussels. All peptones at present in the market are far from satisfactory. Weyl's peptone has thus far been the best in use; it contains 50 per cent. of albuminose, but only 6 to 7 per cent. of genuine peptone. The preparations of Kemmerich and Koch are still inferior. The great objection to Weyl's peptone is its horrid odor and its lack of stability. Weyer's peptone contains about 20 per cent. of peptone according to its manufacturer's statement, has an agreeable taste and odor, but is rather expensive, five ounces costing fifty cents.

The profession has sustained an irreparable loss through the death of Prof. H. von Bamberger, the eminent pathologist and clinician of Vienna, known the world over through his numerous and excellent writings. He was a pupil of Rokitansky and Skoda, and began his career as an assistant to Oppolzer. In Würzburg he taught at the same time as Scanzoni, Kölliker, and Virchow. Since 1872 he has belonged to the University of Vienna. His best known work is on diseases of the heart.

A few days ago Berlin had the honor of entertaining within its walls a man who is both a prince of a royal house and an active physician; this distinguished man is Dr. Carl Theodor, Duke of Bavaria, the well-known ophthalmologist who for his charity work in his specialty is worshipped by the poor of his home districts. He spent a few days in visiting the various clinics of Berlin.

J. S.

—The daily papers state that the case of Stewart, the drug clerk in Wichita, Kansas, who was sent to prison for over 10 years and fined $20,800 for selling liquor, has been revived by the re-arrest of Stewart upon the demand of the Assistant Attorney General. Stewart was released by the Governor after serving six months of his sentence. The Attorney General attempted to collect his fine and costs—about $50,000—by selling the building in which the liquor was sold. Failing in this, he had Stewart re-arrested upon the old charge. As the man is poor, he has a good prospect of remaining years in jail, if not again released by the Executive power.

The case seems a hard one, and no doubt will arouse much misplaced sympathy, in spite of the prisoner's persistent violation of the law.

PERISCOPE.

Clinical Value of the Superficial Spinal Reflexes.

At the meeting of the Bradford Medico-Chirurgical Society, October 2, 1888, Dr. Herbert Major read a paper on the clinical value of the superficial spinal reflexes. Brief reference was first made to the reflex functions of the cord; the dependence of these reflexes on the integrity of the reflex loops consisting of afferent sensory fibres, gray substance of the cord, and efferent motor fibres; the purely spinal nature of the reactions; the frequent diffusion of the reflex excitations both in health and, especially, under certain morbid conditions in which the reflexes are exaggerated; the connections of the reflex loops on either side of the cord with the conducting tracts to and from the brain; and the normally greater activity of the reflexes in infancy and childhood than in adults. The series of cutaneous reflexes as given by Gowers and their respective reflex loops were then alluded to, attention being drawn to the statement of Gowers as to the possible absence in health of certain of the reflexes, especially the gluteal, lumbar, and sometimes the cremasteric; so that, he said, it is not to be inferred, from the absence of such reflexes alone, that the reflex pathway through the cord is impaired. Reference was next made to the views of other neurologists with respect to the relative constancy of these reflexes in health, as showing, probably, a further degree of normal irregularity in their occurrence than had been allowed by Gowers; and the opinion was expressed that such further limitations are necessary. The importance of a correct and fully adequate estimate of possible normal variations is evident. The modifications of the cutaneous reflexes in disorders of the nervous system were then considered. The facts were recalled that in cerebral paralysis the reflexes are lowered on the paralyzed side, probably as the result of irritation in the affected hemisphere of the brain; that they are liable to be excessive in diseases of the motor paths from the brain which diminish the cerebral control; and that they are lowered or abolished in affections involving impairment or destruction of any portion of the reflex loops, and consequent interruption of the reflex pathway. With respect to the reliableness of the superficial reflexes in diagnosis, stress was laid on the possible occurrence of disease of the cord outside the reflex loops, and, therefore, unindicated by reflex changes; on the frequent normal absence of the reflexes in the adult; in the occurrence of impairment only in reflexes, slight in degree possibly, and difficult of appreciation; and in the fact that, given an altered state of the reflex, the position of the lesion in the course of the reflex loops remains to be determined. On such grounds it was urged that no attempt should be made, in any case, to rely solely or mainly on any apparent irregularities in these reflexes, but only to utilize them with, and in subordination to, other evidence. Possibly their practical value in diagnosis, he said, has been over-estimated by others; but if this precaution is taken, and the precise significance of the reflexes duly borne in mind, they would be found of assistance in a certain proportion of cases; or, failing to assist, they would not, at least, lead into error.—*Medical Press and Circular*, Oct. 31, 1888.

Prevention of Chronic Joint-Disease in Children.

Dr. Leroy W. Hubbard makes the following suggestions as to the prevention of chronic joint-disease in children, in a communication to the *Medical Record*, November 10, 1888:

1. A careful inquiry by the surgeon into the hereditary history of each family which he may have charge of; and if a well-marked history of hereditary disease, especially tuberculosis, is found, a warning should be given to the parents of the dangers to which the children are exposed.

2. Instruction in regard to hygiene, diet, etc., with the endeavor to keep the nutrition of the children up to the highest point until they have passed the period at which they are most liable to contract a joint-lesion, viz., the period of puberty.

3. When tuberculosis is present in a family, either as phthisis pulmonalis, or as a joint lesion with an abscess, all sputa or discharges should be destroyed or disinfected; and healthy children should be brought as little as possible in contact with the sick. In this way the risk of direct contagion may be reduced to a minimum.

4. Instruction should be given in regard to the importance of any traumatism of a joint or the parts near it, however slight it may be. After such an injury, absolute rest of the joint should be insisted upon until all evidence of inflammation has subsided

and the function of the part is perfectly restored.

5. The prohibition of all sports or exercises which bring repeated traumatism upon one joint. Young children should not be allowed to go up and down stairs frequently.

6. After one of the acute exanthematous fevers, a considerable period should elapse before active exercise, such as running, jumping, or long walks, is allowed.

Poisoning with Nitrobenzol.

Dr. R. P. Rostoshinsky, of Tambov, records (*Proceedings of the Tambov Medical Society*, 1888, No. 7, p. 209) the case of a soap-boiler's cook, 53 years old, who, when looking about for spirits in her master's absence, came across a flask with nitrobenzene. Having found its *bouquet* very pleasant, and mistaking the fluid for some "fine sort of wine," she swallowed a large dose of it, and, a few hours later, was found lying unconscious on the kitchen floor. She was at once sent to a hospital. On admission, she was in a deep comatose state, pulseless, extremely cyanotic, "deadly-cold"; the respirations were few, labored, stertorous; the jaws spasmodically closed, the pupils dilated; the breath smelt of bitter almonds, the fingers and forearms were rigidly flexed, and the skin anæsthetic. Under the influence of analeptics (tincture of valerian under the skin, frictions, ammonia, etc.), the pulse returned. An attempt at washing out the stomach was made, but given up at once in view of a sudden arrest both of the pulse and of the breathing. After artificial respiration was kept up for one and a half hours, and repeated injections of valerian and musk had been given, the patient gradually recovered her pulse and breathing, and at the same time fell into a condition of high excitement with delirium. She began to shout and loudly moan, to toss about and struggle against everybody and everything. Several hours later, however, she became more quiet and able rationally to answer questions, and as rationally to lie: she denied having taken anything in particular, and said she had fallen ill from charcoal fumes. She complained of headache and abdominal pain; her speech was thick, the pulse accelerated and intermittent. Though she passed a good night, on the next day there were still present great prostration and considerable cyanosis. On the third day, fever (temperature 102.4°) set in, and lasted for six days, the temperature sometimes rising as high as 104.5°. Following the woman's request, the author discharged her on the ninth day, though her state was still rather weak.

Dr. Rostoshinsky draws attention to the following points. 1. Nitrobenzene is poison causing asphyxia—that is, a poison which acts first on the red blood corpuscles, destroying their property of absorbing oxygen (partly from the formation of aniline, as Letheby thinks, partly from the action of NO_2, as E. Pelikan states). 2. The respiration is affected before the cardiac action. 3. The nervous phenomena are of a secondary nature, and depend upon a disturbance in nutrition of the nervous system, arising from an abnormal composition of the blood. 4. Cases of poisoning by nitrobenzol are relatively rare. The above case is only a second one at Tambov. The first—a fatal one—was published by Drs. I. P. Poteschin and S. K. Olenin in 1871 (*Proceedings of the Tambov Medical Society*, 1871, No. 8). The Russian literature contains a series of works on the toxicology of benzene and its derivatives, the more important being the researches of E. Pelikan, Marlygin, Werner, Bogdanoff, Starkib, etc.

Pathological Anatomy of Addison's Disease.

Dr. Von Kalden, in a paper entitled "A Contribution to the Pathological Anatomy of Addison's Disease" (*Virchow's Archiv*, Band xiv, Heft 1, October, 1888), gives the following results of his study of the skin in two cases of Addison's disease: 1. The deposit of pigment in Addison's disease takes place in the deeper layers of the rete Malpighi, and in the outer layers of the epithelial cells of the hairy skin corresponding to them. 2. The pigment is not formed in these cells, but in the cutis, and from thence is carried by wandering cells to the place of deposit. 3. Every epithelial cell takes up the pigment from several such wandering cells. 4. Both the principles of general pathology and the relative position of the wandering pigment-cells and the blood-vessels make a blood-origin of the pigment probable. 5. But this origin is not in a disease of the vessel wall, and still less in hemorrhage, as such findings are not constant, and if generally present, are of a secondary nature. 6. An accurate investigation of the mucous membrane in further cases coming under observation promises, perhaps, further disclosures concerning the relation of the pigment to the coloring matter of the blood.

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NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

PHYSICIANS AND NEWSPAPER ADVERTISING.

The daily papers of Philadelphia, about December 10, contained an item stating that a member of the Luzerne County Medical Society had been expelled for advertising himself in the newspapers as a specialist; and one of these papers, whose idea of the proper scope of advertising may be measured by the fact that it has repeatedly given a prominent place to sensational reports of the joy of those who had drawn prizes in the Louisiana State Lottery, was very severe in its denunciation of the action of the Luzerne County Society.

As the case undoubtedly merits discussion, we have carefully investigated it, and will lay the facts before the readers of the REPORTER, with certain comments which we believe to be warranted by the circumstances.

A physician, while a member of the Luzerne County Medical Society, inserted a card in several of the county papers stating that his practice was "limited to the Eye, Ear, Throat and Nose," and that he would be, on certain days, at certain towns. After this he tendered his resignation to the Society. The resignation was referred to the Censors, who reported, in part, as follows:

"It is not necessary for us to enter into any details as to the character of the infringements of the Code of Ethics and of the methods customary in the profession, which Dr. —— admits that he permitted himself to indulge in *before* his offer of resignation and in which he has persisted up to the present time, while still formally a member of the Society. No action having been taken upon his resignation, his connection with the Society cannot, of course, be severed without its consent.

"We do not consider Dr. ——'s excuses for his violation of the laws and precepts of the only code of which we have any knowledge, to be valid: we recommend that the Society decline to accept his resignation and that his name be expunged from a list of its members."

This report was signed by all three members of the Board of Censors, and the recommendation was adopted by the Society without dissent.

From this it will be seen that the Luzerne County Society did only what any society might properly do to a member whose impatience to follow his inclinations was so great that he could not wait until he had been released from his voluntary pledge to abide by its rules. The case, then, was not primarily one of medical ethics, but rather of insubordination on the one hand and of a dignified assertion of authority on the

other, in which the Luzerne County Society was undoubtedly in the right.

But, in addition to the question of discipline involved, the specific offense charged —and admitted—deserves notice.

Newspaper advertising by medical men is condemned by the Code of Ethics, to support which all the Societies in affiliation with the American Medical Association are pledged. Besides this, the general sentiment of the civilized world is opposed to this form of competition among physicians, for the sufficient reason that its natural tendency would be to make the practice of medicine more mercantile than is consistent with its dignity. As a mere matter of morals, no one can question the right of any man to announce his occupation and his address, or even to state—as merchants constantly do—his opinion of the superiority of what he offers to the community or of its cheapness; but members of a liberal profession cannot do this without degrading it, and those who defy the general opinion in this respect must expect the disapproval of all who desire to see the dignity of the profession maintained.

It is to be regretted that newspaper advertising is not uncommon in certain parts of the United States; but it is to be hoped that it will disappear with the conditions which have given rise to it, and that, before long, medical men everywhere will restrict themselves to those unpretentious methods of securing practice which are most consistent with self-respect, and most likely to win the respect of the community.

AN IMPORTANT DECISION.

A decision of much importance to physicians was recently delivered in the Orphans' Court of Philadelphia, by Hon. Wm. N. Ashman, and is reported in the *Legal Intelligencer*, Dec. 7, 1888. A gentleman living in the city was attacked with a disorder of the brain, and in the absence of his family physician another medical man was called, by the business partner of the patient, to attend him. The medical man, feeling that additional counsel would be of advantage to his patient, asked and secured the professional services of Dr. William Hunt. After three weeks' illness the patient died, and payment of Dr. Hunt's bill for professional services was refused, on the ground that he had not been employed by the patient individually, and that the physician who engaged Dr. Hunt had no authority in law to do so.

Dr. Hunt then brought suit to recover and his case was argued by Wm. C. Hannis, Esq., whose presentation of it led to a unanimous judgment of the Court in favor of Dr. Hunt, which was delivered by Judge Ashman. The opinion makes it clear that a physician may recover for his professional services when he has been called in by an accredited agent, or even by a self-constituted agent, when his own conduct, or the act of God, makes such a summons necessary for his own preservation or for the well-being of society.

The particular question involved in this case was, whether or not a physician attending a patient unable to decide what was best for himself was authorized to call in another physician to aid him in treating the patient. This question the Court answers in the affirmative. After stating the rule which governs the conduct of agents in general, Judge Ashman says: "The spirit in which this rule is to be expounded should be in unison with the character of the relations which the parties have themselves established with each other, and should be liberal just in proportion as those relations become more intimate and involve delicate questions of duty and responsibility. To say that the discretion to act promptly in an emergency, which a patient necessarily gives to his physician, is larger than that which a merchant gives to his drayman, is simply to say that a man will resign more of his own authority to the will of the person who is to save his life, than to that of the person who is to take care of his trunks. The trust,

which includes the power for its exercise with which the patient vests his physician, is often practically unlimited, because it may require to be executed at a time when disease has taken away all ability to restrict it. The patient is not to be left to die, on the plea that during such an interval no act of his adviser can be valid, for want of his direct approval. Or the doctor may suspect the presence of an obscure disease, which, if it exists, demands heroic treatment. To communicate the suspicion to the sick man will probably finish him on the spot; may he not solve the doubt by consulting a specialist?''

In defining the mental condition which would justify a physician in acting as agent for his patient, in calling a consultation, Judge Ashman adds: "It is not necessary, for the purposes of this argument, that the decedent should answer to the legal definition of a lunatic. If he was so far mentally disabled as to be unfitted for the proper conduct of his affairs, it was sufficient to justify the action of the claimant. We do not mean to displace the rule of liability from its footing of strict necessity. The burden of proof that in the absence of an express contract, an implied contract has arisen from the exigencies of the case, must always rest upon the claimant. That burden was fully met in the case referred; and the claim of Dr. Hunt was allowed.''

The fact that this decision was delivered by a Judge who is exceptionally conversant with the legal and equitable principles which should govern the relations between physicians and their patients, leaves no room for doubt that it will establish a precedent of great value to medical men.

VISITING NURSE SOCIETY.

There is an institution in Philadelphia which, under the name of the Visiting Nurse Society, undertakes a work that cannot fail of being a great convenience to physicians and a great blessing to a certain class of patients. The object of the Society is to provide good home-nursing for those whose means are too limited to permit them to pay full price for trained nurses, and who are not strictly hospital patients. For such persons it provides gratuitous nursing, though any sum which the patients feel able to pay is accepted as assisting the Society further to prosecute its labors, and as contributing to the self-respect of the beneficiaries. The aid of the Society is extended only to patients under the treatment of a physician. Suitable nurses for surgical, obsterical and medical work are furnished, and emergency calls are received at any time during the twenty-four hours, and answered as promptly as possible.

The field of usefulness open to an association of this kind in a large city is very extensive. Anyone who has had much experience with the poor, even with patients whose means are merely limited, must often have met with cases in which it would have been of incalculable advantage to have had the temporary presence of an intelligent and kindly woman, to assist him in his work, or to supplement it.

It is pleasant, therefore, to be able to call attention to the Society which in Philadelphia undertakes to supply this need, and to commend its example to the imitation of other cities which are not so favored.

FOOD ADULTERATION.

We are glad to call attention to the fact that a comprehensive bill will be presented at the next session of the Legislature of the State of Pennsylvania to prevent fraud and adulteration in the preparation and sale of food. The bill has been prepared by the American Society for Preventing the Adulteration of Food, and provides for the establishment of a Bureau of Adulteration at Harrisburg in connection with the State Board of Health.

The chief officer is to be supplied with a chemical laboratory, and shall appoint a force of Inspectors and clerks, the Inspectors being duly qualified graduates of medi-

cine. The expenses of the Bureau are not to exceed $15,000 per year.

Inspectors will be required to visit breweries, bakeries, dairies, factories, markets, and stores where either food or medicines are prepared or sold, and to obtain samples for analysis. The bill describes what comprises food adulteration in specific instances, and provides a penalty of fine or imprisonment, for violation of the law.

Such a bill should have the support of all medical men as well as of all good citizens. It is exactly in the line of our Editorial on "The Need for Public Analysts" in the REPORTER, March 3, 1888, and we hope that the suggestions there made will not be overlooked in perfecting the proposed bill.

CHILD-BIRTH AFTER EXCISION OF THE RECTUM.

In the REPORTER, February 18, 1888, we gave a description of the method proposed by Prof. Kraske, of Freiburg, for the removal of cancer of the rectum, and referred to the excellent results he had obtained by it in a series of eight cases. An interesting sequel to an operation of this sort is reported by Dr. Lihotzky in the *Wiener med. Presse*, Nov. 18, 1888. The patient was a woman who was operated upon last year according to Kraske's method by Dr. Hochenegg, and who on Oct. 26, 1888, gave birth to a child, under the care of Prof. Breisky. In the absence of a considerable portion of the posterior wall of the pelvis, and because the levator ani and the ligamentous structures at the outlet of the pelvis had been divided, it was expected that the delivery would be irregular. But the expectation was not fulfilled. The delivery was perfectly normal.

This result suggests incidentally some very interesting reflections in regard to the mechanism of labor; but its chief interest lies in the demonstration that such perfect functional results may follow an operation of such gravity and extent as Kraske's operation of excision of the rectum for cancer.

PAMPHLET NOTICES.

[Any reader of the REPORTER who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

164. FIRST CONTRIBUTION TO THE STUDY OF FOLK-LORE OF PHILADELPHIA AND ITS VICINITY. BY HENRY PHILLIPS, JR., Philadelphia. From the *Transactions of the American Philosophical Society*, March 16, 1888. 12 pages.

165. THE PALATAL RUGÆ IN MAN. BY HARRISON ALLEN, M.D., Philadelphia. From the *Proceedings of the Academy of Natural Sciences, Philadelphia*, September 25, 1888. 19 pages.

166. UEBER NATUR UND BEHANDLUNG DES FURUNKELS BESONDERS IM AEUSSEREN OHRE. VON DR. B. LOEWENBERG, Paris. From the *Deutsche med. Wochenschrift.*

164. Mr. Phillips's pamphlet contains one hundred and twenty-two popular sayings, in rhyme or prose, embodying certain beliefs which fall under the general head of superstition. Some of these have a bearing upon medical experience, as, for example, that "fasting spittle will cure a sore eye"; and that "a horse-chestnut carried in the pocket will cure piles"; and many of them will prove very amusing, we fancy, to those who have often acted upon them, but who never expected to see them in print.

165. With his usual thoroughness Dr. Allen has studied a subject which would be unlikely to attract the attention of one less habituated to accurate scientific observation, and has deduced from his study conclusions of a very practical nature. The form and distribution of the rugæ of the hard palate in man would probably be regarded by most medical men as matters of little consequence, and they will be surprised to learn that they may serve as a means of identification of individuals, and that they furnish indications of the existence of certain constitutional diseases, as well as of predisposition to nasal catarrh.

Dr. Allen's pamphlet is of special interest to the student of animal morphology, and suggests lines of investigation in pathology which few, we believe, would suspect who have not made themselves acquainted with its contents.

166. Dr. Loewenberg is a believer in the parasitic origin of boils, and attributes their multiplication in the same individual to auto-infection. He also believes that they are contagious. As a consequence he opposes the method of treating them which consists in the application of poultices and making incisions into them, and recommends the local application of a saturated solution of boric acid in alcohol. For boils in the wall of the meatus of the ear, he aids the application of the parasiticide by a previous light scratching of the epithelium with a heated needle. This method is painless, and much preferable in his opinion to incising the inflamed and exceedingly sensitive tissues.

His pamphlet is very interesting, and presents a very hopeful view of the management of this troublesome affection.

—The Hoagland Laboratory in Brooklyn was opened December 15 with an address by Prof. H. Newell Martin, of Johns Hopkins University, Baltimore.

CORRESPONDENCE.

Apostoli's Treatment of Fibroid Tumors of the Uterus.

TO THE EDITOR.

Sir: In the REPORTER for Dec. 1, 1888, your reviewer of the American System of Gynecology, vol. ii, takes me to task in the following paragraph:

"Sutton gives a good exposition of the subject of Non-Malignant Tumors of the Uterus. We cannot consider the section on treatment, however, as complete. The statistics of the results of operative methods are only brought up to '82–'84, and no mention is made of Thomas Keith's changed views as to the justifiability of hysterectomy. No opinion is expressed as to the value of electrolysis in the treatment of fibroids; we are simply referred to the article by Rockwell in Vol. I. The author concludes that fibro-cystic tumors should be removed, but not necessarily the solid tumors; that removal of the uterine appendages for fibroid tumor is unjustifiable when the tumor can be removed per vaginam; that removal of the appendages is especially indicated in small non-cystic fibroids; that probably 29 out of 30 cases should not be operated upon, as the symptoms do not justify operation. These views are sound, but we believe that the indications for electrolysis should have been defined."

In writing for a text-book it was my aim to give that which I knew to be "sound" and to omit anything doubtful or still on trial. Apostoli's method is still on trial. I myself am at it. Concerning this method I am convinced of several things. On the affirmative side, that it will arrest the hemorrhages; reduce the size of the uterus; if in doing the latter the blood supply to the tumor is partially cut off, it will reduce the tumor to some degree. On the negative side, that electrolysis in the tissues of the tumor and consequent reduction is all rot; that the method is not free from danger; that it opens up an immense field for quackery, only equalled by Bergeon's treatment for consumption; that the fact that subperitoneal fibroids are not affected by the treatment is against its specific claim; that it is a painful treatment, and that all that it accomplishes may be accomplished by less dangerous and less painful means. If I am mistaken in these conclusions I will discover it, for the reason that I try things for myself before I advise my readers in reference to them finally. Again in 1887, in New York, Dr. Apostoli told me, in the presence of Dr. Bantock of London, that he had never cured a fibroid tumor by electrolysis. It is a curious thing to me that while the master fails to cure, his pupils succeed. I am not disposed at present to condemn this method, but I am quite sure that if becomes too public property, that it will kill more than hysterectomy has ever killed. Every tyro may try Apostoli's method, but not hysterectomy more than a time or two.

The method bids fair to be profitable to the doctors, if not to the patients, who will as a rule find the good done very ephemeral. But, as I have already said, it is on trial and I have had no accidents with it, great or small, and I have already said on the affirmative side my convictions as to its merits, and on the negative as to its demerits. I hold that my article in Vol. ii, on the treatment of Fibroid Tumors of the Uterus, can be depended upon by those who favor the work by a study of my article. If my reviewer will take that article for his guidance he will not go far wrong in the next.

Yours truly,

R. STANSBURY SUTTON, M.D.

419 Penn Ave.,
Pittsburgh, Pa.,
Dec. 10, 1888.

Portland Powders.

TO THE EDITOR.

Sir: Could you state in the REPORTER (1) the composition of the remedy for rheumatism or gout, known as "*Portland powders*," and (2) the reasons which may be given for considering it a dangerous remedy.

Also (3) the formula for the remedy widely known as "*Velpeau's compound.*" Concerning this latter I wish to learn the entire formulæ as I understand there is at least one formula for medicine to be taken internally, besides the injection. I have questioned several physicians of long experience in medical practice for information concerning these prescriptions without avail.

Yours truly,

G. M. FOSKETT, M.D.

North Dana, Mass.,
Nov. 20, 1888.

[1. "Portland powder" according to the original prescription was made of equal parts of the roots of Aristolochia rotunda, and gentiana lutea, of the tops and leaves of tencrium chamædrys and erythræa centaurium, and of the leaves of ajuga chamæpitys.

2. There is no reason at all why it should be considered in any proper sense of the term "a dangerous remedy."

3. Do not know.—Editor of REPORTER.]

Multiple Congenital Herniæ.

To the Editor.

Sir: Aug. 5, 1888, I was called to attend Mrs. B., an Italian primipara. Her labor was normal, but tedious. After ligature of the funis, I made my usual examination of the child for deformities, and was surprised to discover a right and left inguinal, a right ventral, and a *dorsal* hernia—the latter extending from about the seventh rib to the crest of the ilium. Opposite this, and in the middle of the spinal column, was an ulcer, about four inches in diameter, and of a light grayish color. In addition to the above, there was talipes varus of both feet. The ulcer healed rapidly. The child, except for its deformities, is now well and hearty. Yours truly,

Frank Post Butler, M.D.

What Cheer, Iowa,
Dec. 4, 1888.

New Instruments.

Any instrument or apparatus sent to the Editor of the Reporter for notice will be treated like a book sent for review. Illustrations suited to our columns will be published with the notice, if cuts accompany the instrument.

Dr. W. S. & F. Black's Cupping Apparatus, Breast-Pump, Aspirator and Stomach-Pump.

Price $10.00.

This is a very convenient instrument, simple in construction, and efficient in action. It may be used as a cupping apparatus, as an aspirator, or a breast-pump, or

as a stomach-pump. The barrel and piston are made of hard rubber, the cups being of glass. The valves act automatically. The capacity of the syringe barrel is about f℥iij. Its action is smooth and easy, and we believe it is calculated to be of great service to physicians, and especially to men practising medicine in the country.

Notes and Comments.

Therapeutic Value of Lipanin.

Lipanin, which was described in an Editorial in the Reporter, March 10, p. 311, has received further study at the hands of Dr. O. Hauser, who publishes a communication on the subject in the *Zeitschrift für klin. Medicin*, Band xiii, Heft 5, 6. We learn from an abstract of his article in the *Wiener med. Presse*, Nov. 4, 1888, that lipanin resembles in appearance very closely the yellow unpurified cod liver oil, but is without the disadvantages of the latter. It was employed by Hauser in 38 children, varying in age from fifteen months to thirteen and a half years, and suffering with disturbed nutrition, rickets, anæmia, scrofula, and tuberculosis. In the greatest number of cases the lipanin was taken willingly without any addition to it, and was well borne. Disturbances in digestion, such as are present when cod liver oil is given, were never observed. Moreover, it could be taken continuously during the hot season. In all the cases in which this was to be expected, an increase in weight occurred. It is almost completely absorbed and appropriated. It is used in about the same dose as cod liver oil, and can be combined with other medicaments, such as creasote, menthol, phosphorus, etc.

Naphthol Bandages.

Prof. J. L. Reverdin has described his experiments with bandages impregnated with β-naphthol. He was incited to try it by Bouchard, who recommended β-naphthol in the disinfection of the intestinal canal as an agent but very slightly poisonous. Reverdin employed the naphthol as a powder, which he dusted upon wounds, and as a ten to fifteen per cent. gauze. The latter was first sterilized at a temperature of 130° C. (266° F.) and then impregnated with an ethereal solution of naphthol. He has employed the naphthol bandages in 38 operations, of which 18 were cases of tumor-extirpation, 4 were amputations, 1 was a laparotomy, 3 were radical operations for hydrocele, etc. In 23 cases primary union was obtained without a trace of suppuration even at the opening for drainage; in 12 cases there was delayed primary union; and in 3 cases suppuration occurred as the result of some mistake in the technique of the operation.—*Wiener med. Presse*, Nov. 4, 1888.

Vocal Music and Prevention of Phthisis.

At the meeting of the Medical Society of Virginia, Oct. 23, 1888, Dr. C. E. Busey, of Lynchburg, Va., read a paper on the cultivation of vocal music in schools as one of the means of preventing phthisis. He states it as a well-known fact that those nations which are given to the cultivation of vocal music are strong vigorous races, with broad expansive chests. If an hour a day in public schools were devoted to the development of vocal music, there would not be the sad spectacle of the drooping, withered, hollow-chested, round-shouldered children which confronts us now. There is too great a tendency to sacrifice physical health upon the altar of learning. Vocal music is gymnastic exercise of the lungs, producing increased expansion of the lung tissue itself. The lungs in improved breeds of cattle, which naturally take little exercise and are domiciled much of the time, are considerably reduced in size, when compared with those animals running at liberty; and so it is with the human beings who lead inactive lives. Phthisis generally begins at the apices of the lungs because these parts are more inactive, and because the bronchial tubes are so arranged that they carry the inspired air with greater facility to the bases than to the apices. During inactivity a person will ordinarily breathe about 480 cubic inches of air per minute. If he will walk at the rate of six (*sic*) miles an hour, he will breathe 3,260 cubic inches. In singing, this increases more than in walking, as singing well requires all of the capacity of the lungs. The instructor of vocal music, in addition to his musical education, should understand the anatomy and physiology of the respiratory organs.—*Virginia Medical Monthly*, Nov., 1888.

Extirpation of the Rectum.

At the last meeting of the Imperial-Royal Medical Society of Vienna, Dr. Ullmann showed a case in which he had performed extirpation of the rectum after the method of Kraske. On her admission into the clinic of Prof. Albert, the patient stated that she suffered from severe pains during evacuation of the bowels; and she noticed that the feces were mixed with pus and blood. Examination showed the presence of a circular ulcerating carcinoma at a distance of ten centimetres (about 3¾ inches) upward of the anus. Some days after admission colotomy had to be resorted to, owing to very threatening symptoms of ileus. Later on, extirpation of the rectum was performed, after the method of Kraske, of Freiburg. Starting from the middle of the os sacrum two sections were made, which encompassed the whole orifice of the anus; after extirpation of the coccyx, and resection of the os sacrum, the rectum was divided upward, and the end of the rectum was sutured into the posterior angle of the wound. The patient recovered in a short time, and the weight of her body increased by ten kilogrammes within two months after operation.—*Medical Press and Circular*, Nov. 21, 1888.

Poisoning with Chlorate of Potash.

In number 41 of the *Deutsche med. Wochenschrift*, Dr. Bernard Schuchardt records three cases of fatal poisoning with chlorate of potash: one observed by Dr. Mendelsohn, of Berlin, and one seen by Dr. Sabarth, of Lötzen, in which the potash was taken with suicidal intent. The first patient died in fourteen hours after being received into the hospital; the second in twenty-six hours after taking the poison. The third case was observed by Dr. Lacassagne, of Lyons. The patient was a woman who was given chlorate of potash in order to produce an abortion.

Foreign Body in the Ear.

A unique case, says the *Weekly Med. Review*, Nov. 17, 1888, occurred in the practice of Dr. William Caston, of Corsicana, Tex. A child, three years of age, the daughter of an intelligent general practitioner, had a discharge from the right ear for two months. The father of the child had treated the ear by syringing it out with warm water and blowing powdered boracic acid into the canal.

When the little patient was brought under Dr. Caston's care, he cleansed the auditory canal and on examination found a hole in the drum membrane, of the size of about one-third the surface of the membrane. The syringe was again used in order to cleanse the middle ear, and a small lump was brought away which was found to be the shell of a house-fly covered with pus. The fact that the soft parts of the fly had been dissolved indicated that it had remained in the middle ear cavity for some length of time. Dr. Caston dried the ear, blew in equal parts of iodol and boracic acid, and the discharge ceased from that day. The opening in the drum membrane closed and the hearing was soon restored to normal.

Prognosis in Neurasthenia.

Dr. Landon Carter Gray, in a communication published in the *N. Y. Med. Journal*, Oct. 20, 1888, states with regard to the prognosis in neurasthenia that it is variable in each of the forms. The purely reflex form will end in recovery, as a rule, when the reflected cause is removed. The lithæmic form will vary in prognosis according to the severity of the nervous symptoms and the time of the year when the first symptoms show themselves. If the nervous symptoms are slight, the recovery is usually speedy. If the nervous symptoms are severe, and especially if the vertigo is marked, the duration of the disease may be prolonged through a year, even with treatment, and the vertigo may last several years. Relapses are not infrequent. Warm weather, he says, has a markedly unfavorable influence upon the nervous symptoms—so much so that he has never known severe nervous symptoms, beginning in the spring or early summer, to disappear until cold weather made its appearance. The simple form of neurasthenia, he states, has usually an excellent prognosis if radical treatment is adopted; otherwise recovery is a matter of chance, and he has known cases which he believed to be of this form pass into a gradual and fatal exhaustion. Dr. Webber states that marked disturbance of the arterial tension is of evil prognosis, and *vice versâ;* but Dr. Gray has not as yet been able to test this point himself.

Supposed Case of Hydrophobia.

A boy named Joseph Stephenson, aged 12 years, died on December 12, 1888, from supposed hydrophobia. On October 24, the boy saw a dog lying on a neighbor's door-step and walked up and patted it. The dog then snapped at the boy and bit him on the lip and cheek. The boy was taken to a neighboring drug-store, where the wound was immediately cauterized with nitrate of silver, and the boy went home.

Two days later, Dr. Thomas S. Sozinskey was called in, and found Stephenson's face much swollen and the wounds inflamed. Under treatment the boy apparently became well, the wounds having healed in about ten days. On Dec. 9, he became sick, restless and feverish, and on Dec. 12, when Dr. Sozinskey saw him again, Stephenson was suffering from fever and was excitable.

At this time the symptoms, the doctor said, pointed decidedly to hydrophobia, and they became more marked as the day advanced. That evening the boy was in a violent state of feverish excitement, he frothed at the mouth, and had desperate spells of asphyxia, during one of which he died.

All efforts to find the dog, or to ascertain whether it was suffering from rabies at the time it bit the boy, have been unavailing.

In investigating the case it was learned from the boy's brother, who saw the biting, that immediately afterward some men drove the boy away from them saying that he would have hydrophobia, and that if he bit them they would go mad too.

Experiments With Creolin.

Michael Pleskoff communicates to the *Therapeutische Monatshefte* some therapeutic experiments with creolin, which he made in the wards of Prof. Jurasz, in Heidelberg, in cases of chronic rhinitis, ozæna, and dry pharyngitis. He made use exclusively of a one per cent. watery solution of creolin and employed it in 15 cases. The results obtained were so favorable that the author most warmly commends it for further trial. In chronic rhinitis with or without fetor, tampons of cotton were dipped in the creolin solution, very gently squeezed out, and introduced deep into each nasal chamber by means of a sound. The tampons were allowed to remain about twenty minutes. During this time the patients felt a slight burning, which, however, soon passed away upon removal of the tampon. Unpleasant symptoms were never observed. The favorable effect of the creolin showed itself in a comparatively short time by the qualitative and quantitative change in the secretion. The quantity of the discharge diminished and its purulent character gave place to a more normal secretion of mucus. It exercised an especially good influence upon the troubles present in ozæna. It caused the disappearance of fetor more quickly and completely than had been effected with carbolic acid. Formation of crusts also ceased, and the secretion of the mucous membrane became normal. The results were not less favorable in the so-called dry pharyngitis, in which affection the tampons were pushed through the nose to the nasal fossæ, so that, by hanging down, they came in contact with the mucous membrane of the pharynx. The rest of the mucous membrane of the pharynx was swabbed with a pledget of cotton wet with creolin solution, and held in place with forceps.—*Wiener med. Presse*, Nov. 4, 1888.

On Special Service.

Very nearly twenty years ago a brilliantly aggressive member of the Massachusetts Medical Society asserted that specialists were the officers, and general practitioners the rank and file, of the profession. This sentiment was by no means heartily re-echoed at the time, the medical specialist being then a comparative rarity, and the "rank and file" largely in the majority. Nor has this assertion, it is safe to say, found more favor in the later years, although the specialists have greatly increased in number; for, with the subdivision of labor, and the exploration of hitherto comparatively unknown regions of research, there has come a sense of interdependence and community of interest, which is a most valuable and wholesome thing in either an army or a brotherhood, and from which springs naturally an appreciation of the necessity for community of knowledge.

To carry out the military simile in another form, while the general practitioners constitute the main body and strength of an army, the officers of which are all promoted from the ranks, the specialists form a skirmish line of volunteers going out in different directions to explore, to gather information, and, most important sequence, to report back to the main body the line upon which it may, after corroborative investigation, advance with safety.

One of the duties, therefore, of the specialist, and particularly of the specialist with material for investigation at his hand, is *to investigate;* and another of his duties is *to teach*, in so far as the gift of teaching has been given him, and to report as simply and as plainly as he can what he has learned; since the knowledge which he has acquired is not his, but is held in trust as the property of the main body of which he is one of the rank and file on special service.—*Boston Med. and Surg. Journal*, Nov. 22, 1888.

Army Medical Board.

An Army Medical Board will be in session in New York City, N. Y., from May 1 to 31, 1889, for the examination of candidates for appointment in the Medical Corps of the United States Army, to fill existing vacancies.

Persons desiring to present themselves for examination by the Board will make application for the necessary invitation to the Secretary of War, before April 1, 1889, stating the place of birth, place and State of permanent residence, and enclosing certificates based on personal knowledge from at least two persons of repute, as to American citizenship, character and moral habits. Testimonials as to professional standing, from Professors of the Medical College from which the applicant graduated, and of service in hospital from the authorities thereof, are also desirable. The candidate must be between 21 and 28 years of age, and a graduate from a *Regular Medical College*, evidence of which, his diploma, must be submitted to the Board.

Further information regarding the examinations and their nature may be obtained by addressing the Surgeon General, U. S. Army, Washington, D. C.

JOHN MOORE,
Surgeon General U. S. Army.

An Alumni Association of the University of Pennsylvania.

The graduates of the University of Pennsylvania residing in Maryland and the District of Columbia held a meeting December 14, and formed an association to be known as the University of Pennsylvania Alumni Association of Maryland and the District of Columbia. The association starts with a membership of 110, of whom 36 reside in Washington, 31 in Baltimore, and 43 in Maryland, outside of Baltimore. Dr. W. W. Johnston was elected President; Dr. R. Lorini, Secretary. The Faculties and the Board of Trustees of the University were represented at the meeting by prominent alumni from Philadelphia.

Philadelphia Polyclinic.

The Philadelphia Polyclinic is about to inaugurate a three months' Special Course in Ophthalmology, adapted to the needs of physicians who desire to pay special attention to ophthalmic practice. It will include systematic didactic instruction and quizzing, with three hours of clinical work daily. With the demand that exists for this kind of instruction, and the facilities this institution can offer, the course can be strongly recommended to physicians.

Association of Ex-Residents of the Pennsylvania Hospital.

The fourth annual meeting of this Association will be held in the Pennsylvania Hospital on Thursday, December 27, 1888, at 8 P.M. After a brief business meeting there will be a social reception and entertainment to renew and revive old friendships.

NEWS.

—Prof. Rummo, of Naples, editor of the *Riforma Medica*, has been appointed Professor of Clinical Medicine in the University of Sienna.

—Dr. Charles L. Minster died in Philadelphia December 14, it is supposed from the effects of an overdose of morphine, taken for the relief of pain.

—Dr. Henry F. Formad has resigned the position of Demonstrator of Morbid Anatomy and Pathological Histology, in the University of Pennsylvania.

—The epidemic of typhoid fever in Providence, Rhode Island, is increasing in gravity. The source of the disease is said to be the Pawtuxet River, from which the city derives its water supply.

—The stated meeting of the Lancaster City and County Medical Society was held at Lancaster Dec. 5. Interesting papers were read, and a memorial of the late Dr. D. I. Bruner was presented by Dr. Craig.

—Dr. Maurice N. Miller died in New York City Dec. 8. He was graduated from the Medical Department of the University of the City of New York in 1877, and for a time practised medicine in Philadelphia.

—Malignant diphtheria is reported to be raging along the line between Berks and Lancaster Counties, Pennsylvania. In some families two and three children have died, and even adults are afflicted with the disease. At Reamstown the schools have been closed.

—The *Boston Med. and Surg. Journal*, Dec. 6, 1888, says that the Gouverneur Hospital, New York, one of the smaller city hospitals, has been closed by order of the Commissioners of Charities and Correction, and the patients removed to Bellevue in order to permit a thorough disinfection and fumigation of the building; the house-staff, however, will remain on duty to attend to out-patients and to ambulance calls. Dr. Chalmers, the ambulance surgeon, contracted diphtheria some weeks ago from a dispensary patient, and since that time other cases of the disease have developed in the hospital. The attack of diphtheria was followed by pneumonia and endocarditis in the case of Dr. Chalmers, and little hope is entertained of his recovery. There is a proposition under discussion by the commissioners to abandon the old building entirely, and erect a new reception hospital in the neighborhood.

HUMOR.

The Uncertainties of Life.—Patient (to young physician)—"You say, Doctor, that I am well now, and that no further danger is expected?" Physician—"I apprehend none, sir; but life is uncertain." Patient—"Perhaps I had better pay your bill now." Physician—"Well, yes, sir, it might be as well; as I have said, life is very uncertain."

In front of the provision store of one McMahon, at Crescent Beach, near Boston, numerous squashes were displayed the other day. Rain-drops falling upon them from the electric-light wires so charged the vegetables with electricity that McMahon, in handling one of the squashes, received a severe shock. Other persons tried to pick up the squashes, with the same result.—*Ledger.*

A Nervous-Looking Man went into a store the other day and sat down for half an hour or so, when a clerk asked him if he could do anything for him. He said no, he didn't want anything. She went away and he sat there for half an hour longer, when the proprietor went to him and asked him if he wanted to be shown anything. "No," said the nervous man, "I just want to sit around. My physician has recommended perfect quiet for me, and he says above all things I should avoid being in crowds. Noticing that you did not advertise, I thought that this would be as quiet a place as I could find, so I just dropped in for a few hours' isolation." The merchant picked up a bolt of paper cambric to brain him, but the man went out. He said all he wanted was a quiet life.

The Prayer-Book on Quack Medicine.—A Yorkshire man was very ill, but doggedly opposed to spending a penny upon the doctor. He had found, he thought, a more excellent way, and was accordingly conducting, with very alarming results, some experiments upon his constitution. "My dear Mrs. Blank," said the Vicar to his obstinate parishioner's wife, "your husband is really killing himself with those pills. It is a case of suicide—a downright sin." "Yes, sir," replied she, "and many's the time I've prayed against it in the Church service." "In the Church service?" said the Vicar doubtfully. "You mean when we pray for the sick?" "Oh, no, sir," was the reply; "I mean when we always say—in the Litany, isn't it?—'from all false doctoring, good Lord deliver us!'"—*Cornhill Magazine.*

THE

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COMMUNICATIONS.

PNEUMONIA AND ITS TREATMENT.

BY W. H. CURTIS, M.D.,
WILMINGTON, ILL.

The mortality statistics of this disease as furnished us by our hospital reports, afford us much cause for regret. Whether the mortality in general practice is greater than it was a quarter of a century ago, is perhaps still a question; but all must agree it is too great. In the literature of this, as in that of many other diseases, there seems to be a lamentable dearth of recorded observation by private physicians. Were the reverse the case, I am convinced the death-rate of pneumonia would not show such high figures. While this disease has always been a serious and frequently a fatal one, it has not been my experience that the mortality reached thirty, twenty, or even ten per cent. in any considerable series of cases.

I regret to say that, previous to three years ago, I, like many of my brother practitioners, kept no record of my cases; since that time I have notes of one hundred and sixteen cases of pure uncomplicated lobar pneumonia. In this series I have carefully excluded all cases of intercurrent pneumonia, and all cases in children under five years of age, as being probably lobular pneumonia.

While it would be a waste of time to give their individual histories, I will simply state that there were, between five and fifteen years of age, thirty-four cases; between fifteen and thirty, nineteen cases; between thirty and forty-five, twelve cases; between forty-five and sixty, twenty-one cases; between sixty and seventy-five, twenty-five cases; between seventy-five and ninety-one, five cases; one being eighty-two, one eighty-nine, and one ninety-one years of age.

Of these one hundred and sixteen cases, two died. One hundred and ten consecutive cases recovered.

Case one hundred and eleven occurred in a man of eighty-two, an habitual drinker, for whom no physician was called until the third day of his illness, he having had little or no care meanwhile, and dying within six hours after I saw him, probably of heart failure. This case might justly be excluded from my series, as practically I gave him no treatment whatever.

Case one hundred and fourteen occurred in a woman of 76, whom I first saw thirty-six hours after the initial chill, and but once a day thereafter. Both lungs were involved, and she died of heart failure on the sixth day, twelve hours after the crisis.

While this is perhaps an unusually fortunate showing for so large a series, I am bound to say they were not selected cases, but taken as they came, and embracing every feature of the disease and of the social scale. Many were treated without the commonest necessities, others were supplied with all the physician's heart could wish, but all alike were enabled to have what many a poor sufferer in the city has been forced to give his life for want of—pure air.

I am frequently asked how I treat pneumonia; I will state some of my views as briefly as I can, but first let me premise by saying that I recognize pneumonias *and* pneumonias.

In perhaps no disease with which we have

to deal, is the injunction "generalize your disease, and individualize your patient," better worth heeding.

While lobar pneumonia in the palsied old man of eighty, the robust athlete of thirty, or the growing adolescent, may always be lobar pneumonia, it does not follow that the treatment should always be the same.

In my cases the initial rigor has been quite constant, but very variable as to severity, being most pronounced in those we may call plethoric, and perhaps only a slight chilly sensation in the anæmic, the old and the young. This is followed by an immediate rise of temperature, usually reaching its highest point within twelve hours. With me it has been rare that I found this maximum, or say the evening temperature of the first day, exceeded at any time during the course of the disease; this is especially true of the more sthenic cases, and may perhaps be attributed to the initial shock to the nervous system, and the pain of an accompanying pleurisy, which is usually alleviated by appropriate remedies before the next visit.

In this series of cases, the maximum temperature in any one case was 106°, the minimum 96°; as a rule they presented the characteristic curve, ranging from about 103°–104° in the evening to 101°–102° in the morning.

I have met with an occasional afebrile case, running its entire course with very little elevation of temperature. These cases are almost always in the old and anæmic, and are never to be regarded as "safe" cases.

One patient never had a temperature of 100° but once, and then only for a short time, usually ranging about 99°, and yet the patient was a very sick one. I have rarely had to make use of antipyretics, that is, the more heroic ones. An occasional sponging with cool or tepid water has answered every purpose. I have never employed the cold bath, nor applications of ice, and I must confess I fail to see their advantage over less violent measures. The capillary circulation has seemed to me to maintain the just balance between the interior and the exterior of the body.

With each pulsation of the heart a large quantity of blood is forced into the capillaries of the skin; of course the application of cold (*i.e.*, ice) would tend to reduce quickly the temperature of this mass of blood, but there is a secondary effect to be feared, the contraction of the capillaries themselves, thus tending to restrict the subsequent flow of blood to the skin, and aggravating the existing engorgement of internal organs. Cool or tepid sponging, while not so prompt, is I think sufficiently so, and its effect more prolonged, while it has the additional advantage of being grateful to the patient, and is not productive of shock.

I have never met with a case when I feared for the patient's life because of continued high temperature *per se*.

The condition of the vascular system requires close scrutiny at all periods of the disease, nor is the pulse always a reliable guide as to the extent and sthenic character of the inflammation. In the plethoric robust individual, anything which interferes with the circulation frequently tends to quicken the pulse and increase its volume, while in the anæmic and ill-nourished a much greater extent of inflamed lung-tissue may be productive of a weak and compressible pulse.

In pneumonia we are apt to have two distinct periods of pronounced interference with the circulation, the first immediately following the onset of the disease, and mechanical or obstructive in its nature; the second occurring at a variable period and dependent upon a failure of cerebro-spinal innervation.

Both are frequently accompanied by cyanosis, but the action of the heart differs widely; in the one case we have a full bounding pulse, in the other a weak, compressible, and frequently an intermittent one. Venesection has been advocated at both periods, but I have never used it, although I am prepared to admit its theoretical propriety in the earlier stages of the first period; but it is rarely the case that I see a patient who would submit to this procedure, until the proper time for it has passed. In the second period I fail to see the propriety of venesection, even theoretically, and, so far as I know, its advocates have only been able to give us the statistics of an almost unbroken series of deaths.

I have no special or specific treatment for pneumonia to offer; perhaps no two of my cases have been treated alike, and yet there are certain indications common to most cases that seem to call for about the same remedies. I am no believer in the doctrine that all cases can be aborted, neither do I believe that medicine is useless in this disease; in fact, I do believe there is perhaps no disease with which we have to deal, when the judicious use of remedies is productive of better results. On my first visit I always seek to provide for free

ventilation, preferably without draughts, but fresh air at any cost: this is our cheapest and perhaps most effective remedy. The bowels are commonly found more or less constipated; this I relieve by a free purge, usually of calomel.

This procedure I esteem important not only for its primary effect, but because it diminishes the necessity for an exhaustive movement of the bowels at a later period of the disease, when it is necessary to conserve all of the patient's strength. For this reason too, I make a thorough physical examination on my first visit, and arrange my patient so that all subsequent examinations may be made with as little disarrangement and movement as possible.

It is not well to make a patient with pneumonia sit up, turn over and move about on every visit, and if the first examination has been a thorough one, the vital signs which may be obtained without much disturbance of the patient are usually amply sufficient to furnish a fair guide for treatment. Rest, physical and mental, is a not unimportant matter. If pain and cough are severe, I usually make use of counter irritation with mustard or perhaps a blister in the robust, and give an anodyne, Dover's powder or morphia. If the skin is dry and pungent, a diaphoretic such as nitrate of potash or aconite. If I am sure of my nurse, and very much depends thereon, I am partial to the hot poultice for the first day or two, followed by the cotton jacket; if I cannot depend upon the nurse, the cotton jacket from the first. Nothing is more injurious than an improperly applied poultice which allows the patient to become chilled, the clothing soiled and saturated. With suitable directions for the diet, this is about all that is necessary for a day or two.

Upon the appearance of the first symptoms of nervous exhaustion, indicated by a flagging heart, sleeplessness, etc., I resort to a stimulating treatment, carbonate of ammonia, strychnia, atropia, digitalis, the latter being of decided benefit in my estimation, whether kidney complications are present or not.

But the stimulant *par excellence* is alcohol, in the form of champagne, whiskey or brandy, and were I confined to one remedy in the treatment of this disease I think I should choose alcohol.

It is true many patients will recover well and promptly without it. Very well, don't give it in these cases; but there are others, and I have seen many of them, who I am convinced will die without it. I do not claim any specific quality for alcohol in pneumonia, only that it seems to meet certain indications, particularly in the old, better than anything else.

A very small quantity may be required to tide over a dangerous period: an ounce may be sufficient for twenty-four hours, or you may need that quantity every hour; I know of no rule for its administration but its effects. I will say this. I never yet have seen a case where I thought it did harm. As a rule, I find stimulants indicated by the third or fourth day, when they should be commenced in small or moderate quantities, perhaps in the form of egg-nog or milk-punch, and gradually increased as needed until the crisis is passed.

From the fourth day on, *be sure of your nurse;* everything now may depend upon the faithfulness with which your orders are carried out, particularly in regard to the administration of stimulants. Many untrained nurses, and those are the kind the majority of physicians have to deal with, are prone to substitute their views for yours as to the quantity required. The temperature and pulse must be closely watched; probably the latter will have become irregular, weak and perhaps intermittent; but when the temperature begins to fall, look out, for the crisis has come, and frequently it comes with a crash; 100°, 99°, 98° are quickly reached, but even here it does not always stop unless all your precautions have been fully effective, but plunges down until 97° or even 96° is reached, and now you have all the phenomena of profound collapse.

Now or never is the time for liberal stimulation; no use now to regret that you did not early in the disease bleed to syncope, or give heroic doses of calomel or tartar emetic *et genus omne*. Nothing will answer now but to whip the tired heart until it beats again, and rouse the sleepy cerebro-spinal system with alcohol, strychnia or atropia until the chest heaves once more. Even artificial respiration may be required for a time. I am sure I saved at least one life by this procedure, in a case when stimulants had not been properly given at the period of crisis.

If it is urged that there is nothing new or novel in the line of treatment I have indicated, I can only offer as an excuse for taking up your space, that its results have been perhaps a little old-fashioned also.

While no one is more ready to grant all honor to the triumphs of modern therapeutics than myself, I cannot help feeling

that it is perhaps better for the general practitioner not to place too much confidence in specifics, to the neglect of that great fundamental principle of medicine, the placing of the patient in the best possible physical condition to resist disease. Old friends are proverbially better than new ones, and the physician is always most successful in the cure of disease who knows how to use a few remedies well. Following the line of treatment indicated, crisis has generally occurred on the fifth day, never later than the seventh, and recovery has been prompt and complete.

DENOMINATOR TRITURATIONS.

BY EDWIN PYNCHON, M.D.,
CHICAGO, ILL.

At present the tendency in medicine is toward the prescribing of remedies more concentrated in form and positive in action. In the alkaloids we have the acme of concentration and of therapeutic power as well as the advantages of permanency and of invariability.

While minuteness of dose is primarily advantageous, it is coupled with the disadvantage of being more difficult to dispense, as extreme accuracy is imperative. In the dosimetric and other granules on the market we have a convenient and precise method of prescribing these remedies when pill form is acceptable. I have frequently found it desirable to have the remedy prescribed prepared in the form of powder or triturate. For some time I have been employing preparations in a form of triturate which I have called denominator triturations, and which have proved highly satisfactory. This system of trituration is free from objections which can be made to the decimal or centesimal systems as used in the homœopathic school, which systems are founded upon a geometrical progression so as to make them practically valueless for regular prescribing.

Were decimal triturations and dilutions marked as are sublimate solutions, they would read 1 in 10, 1 in 100, 1 in 1000, 1 in 10,000, etc. As triturates are usually given in three grain doses, the prescriber would be giving either 3-10, 3-100, 3-1000, or 3-10,000 of a grain as the case might be up to 4x, and as one goes "higher" the dose diminishes proportionately. For regular prescribing, a system of trituration is required in which the progression is less rapid.

Denominator triturations can be prepared from any remedy which is given in doses of one grain or less. In their preparation I select as denominators numbers which can be evenly divided by the figure 3, and for each remedy the denominator is so selected that a three grain dose of the resulting triturate shall contain what is regarded as being the *average adult dose* of the remedy. For example, taking sulphate of morphine, the average dose of which is 1–8 of a grain, I have triturated one grain thereof with twenty-three grains of sugar of milk and mark it: "Morphiæ Sulphas 24"; of this preparation the number of grains given at a dose is always the numerator over the denominator 24. Thus three grains is 3–24 or 1–8; two grains is 2–24 or 1–12; six grains is 6–24 or 1–4, etc. The remedy is thus sufficiently triturated for accurate dosage and so plainly marked, that, while unintelligible to the layman, it reads in the clearest possible manner to the initiated. The numeral is written or printed in as large type as is the name of the remedy and is on a line therewith so as to be perfectly legible. One soon learns to associate the numeral with the name as a part thereof, and further to classify together those remedies which require the same denominator. The dose can always be accurately measured by means of the three-grain spoon which at the opposite end is provided with a smaller concavity which when even full contains two grains.

The denominators which I find are the best to employ are 3, 6, 9, 12, 18, 24, 30, 36, 48, 60, 75, 90, 120, 150, 180, 240, 300, 360, 450, 600, 750 and 900. The figures 10 and 100 may also be employed, they being the equivalents respectively of 1x and 2x of the decimal system, which may be substituted for them if desired.

This system of triturating and marking remedies will be found to be both convenient and practical by physicians who care to do any office or bedside dispensing, and need not be limited to the alkaloids, but may be employed with the resinoids, glucosides, and oleo-resins, or with other agents, such as arsenious acid, or any remedy which is prescribed in small doses. As there may be a difference of opinion as to what is the average adult dose of a given remedy, each physician can order his triturations prepared of such strength as his experience shall suggest. For example, he may have his Morphiæ Sulphas either 18 or 48. In either case, another understanding the system could use his triturate correctly and could give exactly the dose desired.

The specialist can also employ the system of trituration which I here describe in the preparation of powders for topical application, in which case any inert powder which may seem best can be substituted for the sugar of milk.

Should any physician be interested in the subject of which this paper treats and wish further information in regard to it, I will take pleasure in mailing to him, on request, a reprint of a paper which I read before the Chicago Medical Society, April 16, 1888, in which the matter is more fully elaborated.

703 Chicago Opera-House Block.

IMMENSE LEFT INGUINAL HERNIA, WITH RIGHT INGUINAL AND FEMORAL HERNIA, IN A WOMAN; REDUCTION; RADICAL OPERATION BY DR. W. W. KEEN; RECOVERY.[1]

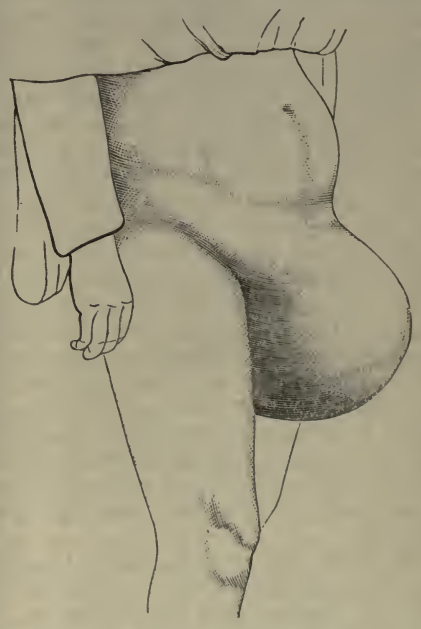
BY CORNELIA KAHN, M.D.,
PHILADELPHIA.

The subject of this report was a well-nourished German woman, 52 years old, a widow, who had been married for 30 years and had given birth to eleven children. She was generally up and about after the ninth day. One birth was a shoulder presentation. When pregnant with her third child, twenty-seven years ago, nausea and vomiting caused a small lump to appear in the left groin, which gradually increased in size, and more rapidly within the last two years, until it attained immense proportions. While in Germany, the patient was fitted with some kind of a steel support, which irritated the integument of the hernia so much as to cause erosions and hemorrhage, rendering it necessary to discontinue its use.

When I first saw the rupture, in December, 1887, there was a tumor hanging down the thigh, reaching nearly to the knees. It was as large as a man's head, and measured thirty-nine inches in circumference and twenty-six inches in length. It was very hard and tense while the patient was standing. It had caused very little suffering, nor had there been much trouble from constipation until within the last two months, when laxatives were necessary. The patient said that the tumor always diminished when she lay in bed, and she had pain only after taking cold or after much exertion. She had not been doing hard work of late, as her children, both married and single, live with her.

On December 23 I took her to the Surgical Clinic of the Woman's Hospital, where Dr. W. W. Keen tried to reduce this inguinal hernia and succeeded in getting some coils of the intestines back into the abdomen. The patient was given a laxative to take every night, and, when next seen, the tumor was not so tense, but she reported having had colic, and that after remaining in bed for two days she had been able to replace some of its contents. Being in bed merely over-night did not affect it to any great extent. When at stool it seemed to retract also.

A suspensory bandage was applied several times. This, however, would not remain in



place, and on January 5 another effort was made to reduce the hernia by taxis and by suction, using Dr. Hartshorne's abdominal tractor for the purpose, as described in the *Medical News*, March 1, 1884. Its size was lessened considerably; and, as it was found to be quite reducible, the patient was advised to come to the hospital and have a radical operation performed.

In February, 1888, she had a severe spell of colic, but did not send for me. When, however, I visited her later, I found the hernia very tense, with swollen veins. A small irreducible femoral hernia, which had been overlooked before, was found on the right side. During March, she had another

[1] Report read before the Clinical Society of Philadelphia, October, 1888.

attack of colic, and on April 4, 1888, she was admitted to the hospital, where she was kept in bed on low diet, with injunctions not to rise. Physical examination showed her heart and lungs to be in normal condition; her pulse 76, respirations 19, temperature 98.4°. Urinalysis revealed nothing abnormal, except a high specific gravity—1,032. On the fourth day after admission, taxis was begun, and repeated on alternate days, with the occasional use of Dr. Hartshorne's apparatus, and a spica bandage in the intervals. The horizontal position seemed to prevent daily evacuations, so the patient was permitted to use the *commode*. The tongue was much coated and the breath offensive when the bowels were not moved freely, but the patient otherwise was in good condition and spirits. The hernia was so large that, in endeavoring to reduce it manually, Dr. Keen was obliged to have four or five hands to compress it. In examining the loose attachments at the neck of the sac, the borders of the ring could be distinctly felt as the finger was swept round the entire circumference and the adhesions at various parts were loosened. General compression of the tumor was used for reduction, during part of the time; but the main effort was to reduce that portion of the bowel which last protruded through the ring. This was large enough to admit the ends of four fingers without bunching them. By repeated taxis the mass was gradually reduced to one third of its bulk, when suddenly, on April 17, thirteen days after admission, the entire contents were restored to the abdominal cavity, leaving a large mass of puckered, wrinkled skin which had covered the sac. A spica and compress were now placed over the ring.

Dr. Keen had not been willing to operate upon the patient until reduction had been effected, fearing that the abdominal wall had contracted materially in the many years during which the hernia had existed, and that the sudden return of the intestines to a cavity not now adapted to their bulk would prove an obstruction to respiration. Two cases of operation for strangulated hernia were known to Dr. Keen in which death had followed in consequence of this upward pressure on the diaphragm.

Three days after complete reduction had been accomplished and the patient had experienced no difficulty in breathing, it was decided to perform the operation, which accordingly took place April 20, 1888. Strict antisepsis was observed, and ether was administered. Dr. Keen made an incision four inches long over the ring, and afterward prolonged it into the left labium. The hernial sac was easily dissected from the skin, being thickened to nearly one-eighth of an inch. When the neck was reached, it was easily recognized by the fibrous aponeurosis of the external oblique. Not a single vessel required ligation. Before operating on this side, it occurred to Dr. Keen that, as the inguinal ring was so widely open and there was so large a sac, the femoral hernia on the right side could be reached by invaginating the sac, and perhaps reduced by traction from within. Although the inner openings of both the inguinal and femoral rings were easily reached with three fingers, all efforts to seize the hernia from within failed, whether with one hand or bi-manually.

Dr. Keen then considered the advisability of opening the abdominal cavity in order to reduce the right hernia, but finally decided not to do this, as the tumor proved to be omental, was giving her no present trouble, and the operation in hand was a sufficiently grave one.

The sac of the left hernia had shrunken considerably since the incision was made, so the neck of the sac was twisted and a chromic catgut suture was passed through it and the abdominal wall at the upper end of the ring; then folding the sac downward so as to fill the cavity of the ring, it was secured to the two borders of the ring by six sutures on each side. In order to prevent too great a gap in the ring, there was placed through it, from side to side, three chromic catgut ligatures, leaving the ring an oval opening, nearly a finger's breadth in width, and two and one-half inches long. The redundant skin, to an extent twice the size of an open hand, was removed, and the wound, extending well down into the left labium, was united with forty-five silk sutures.

The entire incision was fifteen inches long. Two glass drainage tubes were inserted, one at the middle and the other at the lower end of the wound; a strand of horse-hair was also passed through the whole length of the wound.

The next day some pain was felt in the wound, and the temperature rose early in the morning to 102°, but declined in a few hours. The dressing was changed, as it was moderately saturated with blood, and the glass drainage tubes were removed in twenty-four hours. The portion of the sac in the ring looked as if it were going to slough. On the second day the wound was uncovered to observe the part that looked

like sloughing, but there being no tenderness and very little tumefaction, it was simply re-dressed. On the *fourth* day the horsehair was removed and some of the stitches. The ring was found to be considerably retracted, and marked by swelling, and there was a very slight tenderness, on its inner border. A portion of the sac had lost its vitality, but the wound was uniting without inflammation. A movement of the bowels was secured on this day, by the use of high enemata and divided doses of sulphate of magnesia. The patient had no appetite, but took milk and beef-tea as was ordered. In about a week there was moderate sloughing of the sac with consequent odor and discharge, and some pain, but this was controlled with five grains of chloral. A solution of ferri et potass. tartras was applied at a later period, to stimulate the granulating process.

On June 21, two months after the operation, the patient being in good condition, with the wound entirely healed with the exception of a small point of redness, she was discharged from the hospital. For five weeks before leaving the hospital, the patient wore an abdominal bandage. She first sat up June 2, seven weeks after the operation, and from that time improved in spirits and appetite, and was feeling very well at the date of her discharge.

I visited her several times during the succeeding week to look after the wound and to apply a bandage to support the lower part of the abdomen. I cautioned her about being on her feet too much, and charged her to keep the site of the wound well washed with carbolized water, as it was quite sunken, the redundant skin from below folding over it. Toward the close of the week I noticed a swelling above the wound, and fearing a return of the former trouble had her come to the clinic to have Dr. Keen examine it. She was obliged to walk several squares, and when she arrived at the hospital the hernia was protruding to a considerable extent, and we found that the adhesions had given way in the upper border of the ring. This fact made it imperative for the patient to wear a truss, and she very soon became accustomed to its use.

During the next two months I kept watch of the case, and in the latter part of August I noticed a swelling on the right side above and anterior to the old femoral hernia. This proved to be another inguinal hernia, and the patient was now obliged to get a double truss.

Since her discharge from the hospital, the abdomen has lessened in size, and the bowels have continued to perform their functions unaided by drugs. It seems strange that the patient was not troubled more with constipation and pain during all of the years that this immense hernia existed, for there must have been great dragging on the blood-vessels, nerves, and mesentery, and one would have expected the circulation to have been seriously interfered with.

Now that the bowels have been returned to their new but normal situation, and the patient is again on her feet, her functions have been performed naturally and easily.

As this inguinal hernia was of such extraordinary size and reducible and had existed for such a length of time, without giving the patient much trouble, I deemed it of sufficient importance to report its history and treatment in detail.

I have not been able to find any record of cases analogous to this one, as the majority of the few reported inguinal herniæ in women have been strangulated ones. Several reducible ones have been reported, but they were of small size and of recent origin. In the *St. Louis Courier of Medicine*, 1879, vol. i, page 26, there is a case reported which parallels in certain particulars the one I have just described. When first seen by the physician, this hernia appeared no larger than half a hen's egg, making a tumor in the inferior portion of the pudendal region on the left side. At the end of five years it had assumed immense proportions, measuring forty-three inches in circumference and seventeen inches in length. The patient had continued in good health up to this time, when she was suddenly seized with chills and fever, and livid spots showed themselves on the tumor. She died two days later. *Post-mortem* examination showed that the size of the tumor was mostly due to hypertrophied tissues and bloody serum; there was only a small portion of the colon and some omentum in the sac. Although there is some similarity between the cases described there, yet there are also striking differences. The tumor in the case of my patient existed for twenty-seven years, and was reducible, even after this great lapse of time and notwithstanding the large mass of intestines which it contained.

—Over 200 deaths from diphtheria are said to have occurred in the vicinity of Albuquerque, New Mexico, in the first two weeks of December. The breaking-out of small-pox has caused much additional alarm.

PERISCOPE.

Gonorrhœal Infection of the Mouth.

Dr. Condict W. Cutler reports a case of this kind in the *New York Medical Journal*, Nov. 10, 1888. Miss J. C., twenty-one years old, presented herself for treatment at the New York Dispensary, July 18, with the following history: Ten days previously, while under the influence of liquor, she yielded to the unnatural desires of a sailor, and had taken his penis several times into her mouth. The next morning her mouth felt raw and dry, and the saliva had a horrible taste. On the second day little sores made their appearance about the lips, and the condition of the mouth remained the same. On the third day the gums and tongue became swollen and painful, and on the fifth day the whole inside of the mouth was so intensely inflamed that she was unable to eat; and a whitish fluid, mixed with blood, having a nasty odor and taste, was secreted. This continued until the pain and inability to eat compelled her to seek medical advice at the dispensary. On examination, the lips were found cracked and covered with herpes in all stages of development. The mucous membrane of the lips and cheeks was thickened, reddened, denuded of epithelium in places; and, in small areas, covered with a false membrane, which was easily detached, leaving an excoriated surface.

The gums were swollen and retracted from the teeth, bleeding readily upon pressure. The tongue was swollen, very tender on touch and pressure, and could be but slightly protruded, and then only with great pain and effort. The surface was red and glazed in appearance, with small superficial ulcers here and there, secreting a thick yellowish pus. The soft palate and anterior pillar of the fauces presented an inflamed appearance, but beyond the parts seemed to be in a normal condition. The breath was extremely offensive, although there was but little salivation. The secretion from the mouth consisted principally of mucus, pus-cells, and epithelium, and large numbers of bacteria. The false membrane contained micro-organisms resembling the gonococcus, but their identity was not fully established.

The sailor freely admitted that he had been suffering from a severe attack of gonorrhœa, and, not wishing to infect the girl, had entreated her to comply with his unnatural demands. She had yielded to his wishes, and become affected with a purulent stomatitis, probably gonorrhœal in character.

The symptoms were greatly relieved with the local application of glycerine and bismuth subnitrate, together with a mouth-wash of chlorate of potassium; but the patient disappeared from under observation before the cure was complete.

Poisoning With Sublimed Sulphur.

Mr. Alfred E. Vaughan reports a case of poisoning from two ounces of sublimed sulphur, in the *British Med. Journal*, Nov. 3, 1888. It seems that a mechanic had suffered for some time with external piles. He applied to a chemist, who sold him an ounce of sublimed sulphur, with directions to take it overnight. This was on Monday; he took the dose, and repeated it on Tuesday. On Wednesday Mr. Vaughan was called in hurriedly, as the man was supposed to be dying. He found him lying on his back in bed, utterly prostrate, and partly insensible. He had had repeated rigors during the day, and in lucid intervals complained of intense frontal and vertical headache, with aching griping pains in the bowels. His symptoms on examination were briefly: Temperature 104°; pulse hard and quick (120 per minute); tongue dry and deeply furred; breath fetid, and smelling strongly of sulphuretted hydrogen; pupils strongly contracted and insensible to light; skin bathed in a profuse clammy perspiration; abdomen tympanitic and very tender on slight pressure. He retched and vomited almost continuously, and was several times purged during Mr. Vaughan's visit—both vomit and dejecta being composed mainly of slightly bloody mucus, mixed with fine particles of sulphur. The urine he had passed (in driblets) also contained blood. The cause of his illness being ascertained, hot fomentations were applied to the abdomen, and a moderately large dose of castor oil administered. The next day he was still purged, but most of the irritant sulphur appeared to have been eliminated, so it was considered safe to treat the case as one of acute enteritis, and he was put under a course of opiates. He remained in bed for about a week, but otherwise made an uninterrupted recovery.

The case appears interesting since sulphur is not usually counted as a poison. The dose taken (two ounces) was very large, and the symptoms produced were certainly those of a strongly irritant poison.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

PROVIDENT DISPENSARY.

It has recently been announced by advertisement in the daily papers and otherwise that a so-called "Provident Medical Service" has been organized in Philadelphia, with a rather imposing Board of Managers and a well-known medical man as President. The affair is a dispensary, modelled on the lines of what are called "Provident Dispensaries" in London. Persons treated here are to be charged the small sum of twenty-five cents for each consultation. The idea is that this will encourage those who are too poor to pay the usual fees, at least to pay something; and that thus worthy people in straitened circumstances will be saved from the disgrace of pauperism.

If this were a correct idea, and if it were all there was in the scheme, the latter would certainly deserve commendation. But, unfortunately, there is reason to believe that the effect of such an institution as this—if it has any—will be to gather together patients who could pay the fees ordinarily charged to persons in moderate circumstances, and to fix in their minds the notion that twenty-five cents is the proper amount to pay for medical advice. If this is so, it will not elevate the unfortunate, but degrade the undeserving, and prove an injury to the whole medical profession.

More than this: the time is past when institutions of this sort can successfully pose as public charities. All who know anything about them know perfectly well that their underlying motive is usually that which lies at the base of all other advertising schemes, and if—as in the case under consideration—the men connected with it try to make such a concern pay its own expenses, or even bring them in a little revenue, they will have no reason for surprise or complaint if the medical men in whose midst they place their attractive trap, object to it and to them for the very same reasons that prejudice them against any other commercial enterprise which threatens to interfere with their own success.

It has astonished us that men so thoroughly respectable, in the medical profession and out of it, have been willing to have their names connected with this enterprise. We have no idea that it will succeed; for we do not think the American mind is a suitable soil for the cultivation of such ideas as are necessary to the success of this sort of thing; and what we know of the working of such "provident dispensaries" in England leads us to regret very much that this one was ever started.

AN EPOCH AT THE UNIVERSITY OF PENNSYLVANIA.

The University of Pennsylvania is just now going through an epoch which cannot fail to make a lasting impress upon the career of its Medical Department. The recent resignations of Professor Osler and Professor Agnew have involved much more than the choice of incumbents for the chairs they at present occupy. This alone would be a serious matter; for both have filled their positions with so much advantage to the University that the choice of worthy successors to them would ordinarily be no easy task. The case is simplified, in regard to the chair of surgery, by the fact that there is so far but one nominee for Dr. Agnew's position, and that his nomination meets with universal approval.

It is different, however, with the chair of clinical medicine. For this there are already about half a dozen candidates, and the names proposed furnish the Trustees opportunity to make a very good choice, or a very bad one.

But, as stated above, this is not all; for the election of successors to Professor Agnew and Professor Osler may vacate two other chairs, and candidates for both of them are already in the field or ready to enter it. The whole chain of events affects no less than six chairs of instruction, and its evolution will be regarded with deep interest by all who have the welfare of the University at heart.

The epoch is, we believe, a critical one. The men soon to be chosen will have a great deal to do with shaping the career of the Medical Department of the University of Pennsylvania for the next twenty or thirty years, with molding its character and making its reputation. This fact forces itself upon the attention of those who wish to see the ancient standing of the school maintained. The occasion calls for the exercise of the wisest discrimination, and especially, we believe, for narrowly scrutinizing the personal character, the professional skill and the teaching faculty of every candidate for a professorial position. If the men to fill the positions recently opened to competition, or likely soon to be opened, are chosen with an eye solely to these qualifications, the choice will strengthen this grand old school, and encourage the worthy ambition of the kind of men who are most likely hereafter to promote its welfare and increase its fame.

TREATMENT OF PELVIC ABSCESS IN WOMEN.

If by license we regard pyo-salpinx as a form of pelvic abscess—which clinically it is—then the treatment applicable to the immense majority of cases of pelvic abscess is abdominal section and removal of the occluded and distended tube or tubes. The same treatment is proper for abscess of the ovary. To Lawson Tait is due the credit for establishing this method of treating these cases upon a firm basis. He recognized clinically what Bernutz and others discovered, and proved by *post-mortem* examinations, and he went further, and perfected a means of radical cure.

Intra-peritoneal accumulations of pus are common. Clinically they are cases of pelvic abscess. Matthews Duncan insisted upon this point as long ago as 1868. These accumulations are of extreme interest etiologically and therapeutically. It is now admitted that they are usually caused by salpingitis—often by leakage from pyo-salpinx. Hence in many cases there is practically an abscess within an abscess, as pointed out by Aran thirty years ago. Some are cases of suppurating hæmatocele. Perforation of the appendix vermiformis may be mentioned among other causes. Suppurative peritonitis is secondary; belief in idiopathic peritonitis is obsolescent, if not obsolete. The method of treatment for these conditions which is pushing to the front is abdominal section, separation of the adherent omentum, bowels, uterus, bladder, tubes, etc., by tearing or with scissors;

evacuating the accumulated pus or blood, searching for the primary seat of the disease—tube, appendix, etc.—and removal of it; thorough irrigation of the pelvis and belly, which is not restricted to the close of the operation; and drainage. This is certainly logical and brilliant surgery. Whether it is the most successful, we believe, remains to be seen. It has not been proved that the older methods, of incision through the vagina into Douglas's pouch, or through the abdominal wall when the pus is in relation with it, with irrigation and drainage, should not be employed in many cases. In the latter operations, however, the source of the trouble is usually not reached, and subsequently abdominal section may be necessary with removal of the source of the disease. The abdominal viscera are also left adherent, and the adhesions may subsequently give rise to pain and trouble, or even to intestinal obstruction. But when a case has been allowed to progress without interference until the conditions here alluded to are present, the constitution is likely to be so broken that a bold radical operation is to be avoided, since such a patient is apt to succumb from the shock caused by prolonged manipulations.

The newer method of treatment outlined in the first part of this article we believe can be traced to Tait; it is now practised by his disciples in this city, especially in what Parvin has styled the "Philadelphia Dispensary School of Abdominal Surgery." In the future such cases will not be so common—asepsis in obstetrics, and more correct views concerning gonorrhœa will lessen the frequency of salpingitis, and pus-tubes will be removed early, and not be allowed to infect the peritoneum.

Martin, of Berlin, has treated some cases of intra-peritoneal accumulation of pus in which adhesions were formidable by vaginal drainage. Abdominal section was done to make diagnosis exact, and to assist in guiding the trocar from the vagina into the abscess, avoiding at the same time the puncture of important viscera. By draining through the vagina the peritoneal cavity is saved a deluge of pus, and by having one hand in the belly the operator is enabled to use the trocar with safety. That there are disadvantages pertaining to this method is evident, but at the same time it appears to be a resource of value in only a limited class of cases. Gill Wylie states that in cases in which there has been evidence of extreme virulence of the accumulated pus, he has operated by this method for some years.

There is a disposition on the part of many to deny the occurrence of abscess of the pelvic cellular tissue, except as a complication of pyo-salpinx, brought about by leakage of pus from the tube into the cellular tissue of the broad ligament. That the latter sometimes happens is doubtless true, but further evidence will have to be adduced to overthrow the generally received and more rational view that both pyo-salpinx and abscess of the pelvic cellular tissue are brought about by the same cause, traveling along the endometrium to the tube, in the one case, and along the pelvic lymphatic vessels in the other. These cases are usually caused by sepsis after labor or abortion, especially when there is injury to the cervix and vagina. The proper treatment for them is unsettled. The question is, whether it is best to drain the abscess of the parametrium through the vagina, with subsequent removal of the tubes if necessary, or to remove the tubes by abdominal section, empty the pus-pockets in the parametrium into the peritoneal cavity, and trust to irrigation and drainage. This last is quite frequently done with apparent impunity.

There is a growing number of surgeons who deny that abscess of the parametrium occurs except as a great rarity. Bernutz denied its occurrence except as a rare post-puerperal condition. Matthews Duncan regards it as not common. Still there is no doubt that abscess of the pelvic cellular tissue does occur, and without pyo-salpinx

as a complication. The discussion on pelvic abscess at the last meeting of the American Gynecological Society, and the American Association of Gynecologists and Obstetricians was opportune. We think that emphasis should be laid upon the fact that every inflammatory lump in the pelvis is not a pyo-salpinx, as is the growing fashion of to-day to assert. The treatment of abscess of the pelvic cellular tissue is plain. Pus here, as elsewhere, should be evacuated early. Were this done, the pus would not discharge by the bowel or bladder or into the cavity of the peritoneum. When the abscess is low in the pelvis it should be opened from the vagina, the vaginal wall slit, the director introduced into the abscess, its track enlarged with the dilator, a drainage tube introduced, and irrigation practised. The ureter and bladder are to be avoided. Abscesses located high up in the pelvis, usually in front, are apt to be mistaken for the more common intra-peritoneal abscess. If tumefaction of the abdominal wall is present, the abscess may be opened by careful dissection, with little risk of opening the peritoneal cavity. At times it is well to make a counter opening into the vagina. Drainage and irrigation complete the cure. When pelvic hematoma suppurates, the treatment is the same. When the abscess is situated deep in the pelvis the diagnosis will incline to intra-peritoneal abscess. These cases may be treated by the method employed by Parish: abdominal section is done, the diagnosis settled, a second incision made parallel to Poupart's ligament, the peritoneum, if encountered, pushed aside, as in the operation of laparo-elytrotomy, the abscess reached, evacuated, irrigated and drained. The finger is used within the peritoneal cavity as a guide, while making the second incision. Care is taken to prevent the entrance of pus into the peritoneal cavity.

—Diphtheria is prevalent in Unionville, Tuscola Co., Mich.

Book Reviews.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the Reporter.]

THE DISPENSATORY OF THE UNITED STATES OF AMERICA. By Dr. George B. Wood and Dr. Franklin Bache. Sixteenth Edition, with illustrations, re-arranged &c., by H. C. Wood, M.D., LL.D., Joseph P. Remington, Ph.M., F.C.S., and Samuel P. Sadtler, Ph.D., F.C.S. 8vo, pp. xiv, 2091. Philadelphia: J. B. Lippincott Co., 1888. Price, $7.00.

The last edition of the United States Dispensatory is a huge volume of over two thousand pages, containing the information for which it is well known, and with improvements necessitated since the issue of the fifteenth edition. This is a book which is invaluable to druggists and of great value to physicians. The later editions have shown great advances over the previous ones in the character of illustrations and completeness of information conveyed. This edition reflects very largely the opinions in regard to therapeutics of that one of the editors who is not only a practitioner of medicine but also Professor of Therapeutics in the University of Pennsylvania. The pharmaceutical part has been specially watched over by Professor Remington, and is admirably done. The same may be said in regard to the work of Dr. Sadtler, who has treated the chemical side of the subject. As a whole, this edition is a worthy successor of its predecessors, and fully maintains the reputation which they have acquired.

Pamphlet Notices.

[Any reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and *enclosing a postage-stamp.*]

167. Impure Sexual Intercourse the Primitive Cause of Syphilis, Scrofula, and Phthisis. By William B. Dewees, M.D., Salina, Kansas. From the *Medical Register*, September 22 and 29 and October 6 and 13, 1888. 30 pages.

168. A Case of Poisoning by Sulphate of Atropia; Recovery. By Llewellyn Eliot, M.D., Washington, D. C. From the *Journal of the American Medical Association*, Sept. 1, 1888. 8 pages.

167. The writer of this pamphlet holds extreme views as to the dependence of strumous and tuberculous diseases upon syphilis, and cites a number of authors who lend more or less sanction to his opinion; but his argument is too discursive to be interesting, and too loose to be conclusive.

168. Dr. Eliot reports a case of poisoning with atropia sulphate, in which a solution containing about four grains was taken at one draught. He saw the patient, a woman 26 years old, an hour afterward, and succeeded in saving her life by giving 1½ grains of morphia hypodermically in an hour and twenty minutes, when symptoms of opium narcosis came on, and coffee and citrate of caffeine were given. Dr. Eliot gives a *résumé* of thirty-two recorded cases of atropia poisoning, in which it is deserving of note that only two of the victims died. His pamphlet is both interesting and instructive. Those who read it will probably think the dose of apomorphia given was too small to be of service.

CORRESPONDENCE.

Homœopathy.

TO THE EDITOR.

Sir: The exceedingly charitable Editorial in the REPORTER for Oct. 6, concerning the late meeting of the Homœopathic State Medical Society and the address of its President, led me to believe, at the time, that the medical *millennium* was rapidly approaching, and that very soon the "lion would lie down with the lamb," etc. But a copy of this delectable address has sadly dispelled this happy illusion. Indeed I could hardly believe that the editor had read more of this address than the remarkable utterances quoted. *They* do certainly indicate an "advanced mental attitude," but they are strikingly inconsistent with the rest of the address.

He had scarcely voiced the opening sentences, when he begins to laud "Hahnemann in his inimitable organon," and says: "*The law of similars which he gave us, we can all stand firmly and unitedly on these bases.*" Then very soon follows those propositions of Prof. Thomas's, which he also affirms, and which have led to the optimistic Editorial referred to. There is scarcely anything else in this address which can be commended. It is as dogmatic and exclusive as Hahnemann himself could have desired, with this exception.

He continually speaks of the regular practice as a "sect." "For surely if there be a sect in medicine, it is the so-called *regular* sect." In your Editorial you refer to those "who are *suspected* of using the name of homœopath for purely commercial reasons." The President of the State Homœopathic Medical Society is "above any suspicion" of that kind, and boldly proclaims that "*the name* certainly has brought us patients." He evidently sees no reproach in that.

A large part of his address is taken up in endeavoring to establish a claim to State recognition in one or more of our hospitals for the insane, and in proving (to his own satisfaction) by "statistics," the superior results attained by homœopathists in such institutions. And then he stands off and inquires: "Is there *any* science in old-school medicine in Pennsylvania?"

Taking the address as a whole, it sadly disappoints our expectations after reading your Editorial with those isolated quotations.

No wonder Dr. Hammond speaks of homœopathy as that "unspeakable nonsense."

It is only a "delusion and a snare," even with its *mixed* practice, "and that continually."

Yours truly,

E. V. SWING, M.D.

Coatesville, Pa.,
Dec. 12, 1888.

Early Signs of Pregnancy.

TO THE EDITOR.

Sir: After reading an Editorial in the REPORTER, November 24, 1888, entitled "Early Signs of Pregnancy," I write to give my testimony as to the reliability and value of the second method of diagnosis there described. During my connection with the Philadelphia Lying-in Charity I have many times (how often, I really do not know) had occasion to make a diagnosis of pregnancy prior to the end of the third month of gestation. This method of diagnosis so far has stood me in good stead, as—so far as I know—no error has been made. In most instances, subsequent events proved the correctness of the opinion given, as these women remained under treatment for vesical irritation, nausea or other disorders of pregnancy until the diagnosis could be confirmed by hearing the fœtal heart or obtaining *ballottement*, or else they subsequently entered the wards of the hospital for delivery or were delivered in the out-patient service of the institution.

The same results have been obtained in private practice. In a number of cases of pregnancy occurring during lactation it has been possible by this method to determine the cause of the failing health of the nursing child. Some young women, who have sought treatment for suppressio mensium, have been advised to enter the state of matrimony after a diagnosis of pregnancy had been made by this method. Unless the symptoms or circumstances related to me have pointed strongly toward pregnancy, the diagnosis naturally has been made after a course of treatment with iron and laxatives. Sometimes the guilty expression of the girl has led me to say that it was best to determine whether there existed any local cause for the suppression before beginning treatment.

The sensations perceived by the examiner, when the pregnancy is advanced to or beyond

the sixth week, are so plainly described in the Editorial that it is superfluous to describe them here. Perhaps, however, too much stress has been laid upon the jutting-out of the anterior wall of the body of the uterus over the cervix, and too little upon the jutting-out of the lateral walls. The illustration used by Grandin—the fat-bellied jug—to describe the relation between the cervix and body is a good one. This, however, is only a partial illustration. It seems to me that the whole condition can be pictured better to the mind if we imagine a sphere to rest upon the end of a cylinder in such a way that the axis of the sphere and that of the cylinder form an obtuse angle. The sphere represents the corpus, the cylinder the cervix, and the angle, the junction between the two—the angle is directed posteriorly as the pregnant uterus during the early months is normally in a state of quite marked anteflexion.

It seems to me that this method of diagnosis is a boon to everyone who treats diseases of women. Oftentimes women present themselves for treatment having a uterus enlarged from subinvolution, hyperplasia, or a fibroid tumor, and it is important that the practitioner be able to differentiate these conditions from early pregnancy. Moreover there is reason to believe that not a few women are aware that the "long, slim instrument," which many practitioners habitually use (innocently, of course) to determine the position and size of the womb, effectually solves the problem for them as to how they shall limit the increase of their family. On more than one occasion I have had reason to feel thankful that I have been put on my guard by this characteristic shape of the uterus, and have resisted the temptation to explore the uterine cavity of women who have complained of symptoms apparently due to disease of the endometrium.

This method of diagnosis I followed for a long time, in common with most other Americans, with the thought that it was the method of Hegar. Thanks to Drs. Bond, Jaggard, and some others, this error has been pointed out.

I have had no experience in the diagnosis of pregnancy by the method of Hegar, but shall make use of it in any case in which the diagnosis remains in doubt after the usual means have been employed.

Yours truly,

CHARLES P. NOBLE, M.D.

Philadelphia,
Dec. 12, 1888.

NOTES AND COMMENTS.

Creolin in Obstetric Practice.

Dr. Minopoulos has recently communicated to the Munich Gynecological Society (*Münchener med. Wochenschrift*, No. 45) the results obtained by Prof. Winckel in the employment of creolin in obstetric practice. One hundred and forty cases were treated with it; at the beginning a one-half per cent. solution of creolin was used, and subsequently a one and two per cent. solution in a quart of luke-warm water as a vaginal douche. The vagina was washed out before and immediately after the birth of the child, but this was only done in the lying-in period, when there was a febrile temperature, and then twice daily. Slight burning was produced by the injection, especially after delivery, evidently depending upon the antiseptic coming in contact with lacerations of the mucous membrane produced in parturition. The hands and instruments were disinfected with creolin before every examination. Two of the one hundred and forty patients experimented on were affected with severe sepsis, and one died; 19 were slightly septic. Both of the septic patients had been examined outside of the hospital; and in both one per cent. creolin solution was employed only in the lying-in period, not before nor immediately after labor. The failure in these two cases is therefore not chargeable to creolin. Two of the remaining 19 patients were examined in the city and were probably infected when they came into the hospital. This leaves 17 cases which were infected to a slight degree.

On the other hand, among 140 patients treated with corrosive sublimate as a control experiment, three suffered with severe sepsis, of whom one—infected outside the hospital—died, and 13 with slight sepsis. The results obtained with creolin are at least as favorable, if not more favorable, than those obtained with corrosive sublimate. A one per cent. solution of creolin gave brilliant results in a case of abortion with fetid discharge.

Ulcers of the vagina cauterized with concentrated creolin solution healed more quickly than they do under the application of perchloride of iron. Creolin is therefore a valuable substitute for corrosive sublimate and carbolic acid, as it possesses at least in equal degree the advantages of the latter without their peculiar disadvantages.—*Wiener med. Presse*, Nov. 25, 1888.

Creolin as an Antiseptic.

A detailed series of experiments has recently been made in the Vienna Hygienic Institute by Eisenberg on the antiseptic properties and practical utility of creolin. The experiments were performed by mixing a certain percentage of the antiseptic with bouillon-cultures of organisms, from which mixture, after a certain time, the presence of living bacteria was tested by a fresh cultivation free from creolin. It was found that a 2 per 1,000 mixture of creolin killed the cholera bacillus and the streptococcus of pus and of erysipelas within two minutes; the bacillus of anthrax was killed in five minutes, while the typhoid bacillus and the staphylococcus of pus were still alive after one hour. This last organism, as well as tetragenes, was killed in ten to fifteen minutes by a two per cent. mixture. Compared with carbolic acid, it was found that a three per cent. mixture of creolin killed the spores of the anthrax bacillus in two days; a six per cent. mixture within twenty-four hours; while a carbolic acid mixture up to eight per cent. had no effect on the spores within seven days. A similar comparative result was obtained with the hay bacillus, and the superiority of creolin over carbolic acid was further shown by its greater power in preventing the growth of organisms in cultures. Creolin is not poisonous, as it may be given in large doses to dogs without deleterious effect. Eisenberg advises its use in surgery in place of corrosive sublimate, carbolic acid, and iodoform. Spath has strongly recommended its use. He has applied it in the form of emulsion or a creolin gauze, and found that it stimulates the growth of granulations, and aids in separating sloughs without the production of any toxic symptoms. The urine does not present the green color of carbolic acid urine, but tribromophenol may be separated from it on the addition of hydrochloric acid and bromine water.—*British Med. Journal*, Nov. 10, 1888.

Poisoning With Oil of Sassafras.

Dr. L. M. Albright, of Houston, Ohio, communicates a case of this kind to the *Cincinnati Lancet-Clinic*, Dec. 8, 1888. Geo. G., a German, 18 years old, took by mistake a teaspoonful of oil of sassafras. He noticed in a few minutes strange feelings about the head. In half an hour he had hallucinations (declared he was in heaven) and occasional vomiting. Half an hour later he became unconscious; vomiting continued when he was disturbed or on any exertion, and was followed by great prostration and relaxation. Two hours after taking the oil the extremities were cold; the radial pulse could be detected with difficulty. The patient continued in this way until Dr. Albright's arrival, two hours later.

At this time he found the patient with pupils somewhat dilated; pulse at wrist barely perceptible; respiration twelve per minute; extremities cold. He could be roused with difficulty, but was incapable of comprehending or answering questions or of recognizing anyone. On attempting to administer some egg albumen, vomiting was induced. Dr. Albright could detect barely a trace of the odor of the oil, and concluded that it was for the most part ejected from the stomach. The vomited matter contained abundance of very tenacious mucus. Concluding that the violence of the storm had passed, he ordered quiet, with heat to extremities, and egg-nog. The patient regained complete consciousness by midnight, and was ready for breakfast in the morning, and with the exception of feeling a "little weak" made no further complaint.

The effect of the oil seemed to resemble very closely that produced by some of the strong narcotics.

Adulteration.

According to the Massachusetts Adulteration Act, an article of food is deemed to be "adu terated" within the meaning of the act:

1. If any substance or substances have been mixed with it so as to reduce or lower or injuriously affect its quality or strength.

2. If any inferior or cheaper substances have been substituted wholly or in part for it.

3. If any valuable constituent has been wholly or in part abstracted from it.

4. If it is an imitation of, or is sold under the name of, another article.

5. If it consists wholly or in part of a diseased, decomposed, putrid, or rotten animal or vegetable substance, whether manufactured or not, or in the case of milk, if it is the product of a diseased animal.

6. If it is colored, coated, polished or powdered, whereby damage is concealed, or if it is made to appear better or of greater value than it really is.

7. If it contains any added poisonous ingredient, or any ingredient which may render it injurious to the health of a person consuming it.—*American Analyst*, Dec. 1, 1888.

Butyl-Chloral in Trigeminal Neuralgia.

There are only a few remedies which exercise their action upon one nerve alone. According to Liebreich (*Therapeutische Monatshefte*, Nov. 1888) butyl-chloral is one of these; in doses of from 15 to 45 grains it produces anæsthesia of the trigeminal nerve. Liebreich has convinced himself of this in tic douloureux. Unfortunately it is not lasting in its effect, and large doses produce sleep. It is very serviceable, however, in neuralgia of the trigeminus in which the pain is not chronic. Rheumatic face-ache, pains occasioned by injury, toothache, either from an inflammation of the pulp or from periostitis, may be obviated by the use of butyl-chloral. He has used butyl-chloral with much satisfaction also in cases in which at the begining the filling of a tooth has exerted painful pressure.

The drug is disagreeable in taste and difficultly soluble. The following prescription for its use is suggested:

Butyl-chloral	gr. xxx–lxxv
Spiritus vini rectificat. . . .	♏cl
Glycerini	f℥v.
Aquæ destil.	f℥iii ℥vi

M. Sig. Take three or four tablespoonfuls at once.

The size of the doses is to be regulated by the intensity of the pain and by the condition of each individual patient.—*Wiener med. Presse*, Nov. 25, 1888.

Removal of Subplantar Corns.

Unna (*Monatshefte für prakt. Dermatologie*, No. 13, 1888) states that the treatment of subplantar corns is very much facilitated by a judicious combination of salicylic plaster and glycerine jelly. A ring of glycerine jelly about the diameter of the wart is painted round it with a fine but stiff bristle paint-brush. When this ring of jelly has quite set and become dry, a circular piece of the strongest salicylic-plaster muslin (salicylic acid and creasote, each 40 parts) is cut sufficiently large to fit within the ring of jelly; jelly is now painted over the ring of jelly already made, and the piece of plaster itself; and to make assurance doubly sure, a third coat of jelly should be painted widely over all; and when these have become almost dry, a layer of cotton wool is to be placed and pressed on. The larger the surface covered with the jelly the less the local pressure on the corn. In the case of feet which perspire much, especially in hot weather, a single turn of a soft muslin bandage should be folded round the affected part of the foot, before the jelly has become quite dry, covered with a coating of jelly and then with wool, or a coating of the jelly itself, and the neighboring part of the foot painted with flexible collodion. In this way one can keep the plaster in position, even in the heat of summer and in those whose feet sweat freely. The dressing is changed when it becomes spontaneously loose—at the oftenest, once or twice a week; the horny layer acted on by the salicylic acid is removed, and a new dressing applied; and this had better be continued for some time after the wart has been cured.—*Edinburgh Med. Journal*, Dec. 1888.

The Flesh-hooks of Science.

At the meeting of the Edinburgh Chemists' and Apprentices' Association, Oct. 24, 1888, the President, Mr. George Coull, in the course of his address, said: Dr. Lauder Brunton likens the action of drugs on the human body to the action of a man trying to transfix with a flesh-hook various pieces of meat in a pot. It was the custom of the sons of Eli, when they were priests in Shiloh, to send their servant with a flesh-hook having three prongs, which he struck into the pot of any man who was offering up a sacrifice; and all that the flesh-hook brought up the priest took for himself. Now, it would depend on the contents of the pot and the kind of hook employed what the priest's man brought up. With the small pots they were likely to have in Shiloh it would not matter what kind of shank was used; but in larger pots it would matter very greatly, for with a short handle one would not reach the nice pieces lying in the middle of the pot, while with a long one the hooks would go plunging right through to the other side. Let us look at the action of the chlorides of sodium, potassium, and rubidium. Let the metal represent the shank, and the chlorine the hook. Sodium has the atomic weight 23, and is too short to reach the important parts to be got hold of; rubidium equals 85, and is therefore too long, going right through them without laying hold of any; while potassium equals 39, and is just the proper length. Now, what do we find in reality? Why, that the chlorides of sodium and rubidium circulate in the blood without doing any harm, while chloride of potassium is a powerful muscular poison. This is attributed to the differences in the atomic weights. The periodic law which states that elements with similar chemical and physical properties occur at regular

intervals will probably greatly assist in determining what bases to use for certain purposes, as it is not too much to suppose there will be a physiological connection between them as well.

Again, suppose the nature of the hook were changed, then you would get hold of different pieces of flesh, according as it was blunt or sharp. Let bromine or iodine replace the chlorine, and note the effect. The chlorides circulate in the blood without producing any ill effects, so far as the chlorine is concerned. Bromine, representing a sharper hook, acts on the blood and nerve-centres, *e. g.*, bromide of sodium is given in sea-sickness, and bromide of potassium as a sedative when the brain is excited. Iodine, representing a still sharper hook, tends to affect the muscles and glands, *e. g.*, iodide of potassium is prescribed in chronic rheumatism, and iodide of sodium in glandular swellings.—*Chemist and Druggist*, Nov. 3, 1888.

Capillary Aspiration of the Bladder.

This was one of the subjects brought before the Society of Naturalists, at Cologne, by Drs. Rosenberger, of Würzberg, and English, of Vienna. The first speaker remarked it was a procedure warmly recommended by Lücke, and he wondered that it was so little practised. The operation was easily performed. Any kind of aspirator could be used, and a fine needle no thicker than an ordinary knitting-needle passed into the bladder above the symphysis in the linea alba. When all the fluid was evacuated the canula should be removed, with a sudden jerk. By this means no bleeding took place, especially if care was taken to keep the sides of the canal together until they adhered. Of course all antiseptic precautions should be made use of. In old people it was sometimes necessary and frequently useful. It often happened that when aspiration had been performed two or three times the patient could micturate naturally, or a catheter could be introduced, when before such a thing was impossible. It was a procedure generally indicated in retention of a passing character, and when catheterization set up violent hemorrhage from the urethra. The pain from the operation was slight, frequently less than was caused by introduction of a catheter. Dr. English, of Vienna, said he had never practised capillary aspiration of the bladder, and criticized the procedure adversely as both unnecessary and dangerous.—*Medical Press and Circular*, Nov. 7, 1888.

Case of Sciatica Treated with Large Doses of Antifebrin.

In the *Medical Record*, Dec. 1, 1888, Dr. Austin Flint communicates the notes of a case of sciatica treated by him at Bellevue Hospital. The pain was so severe that the patient had been confined to bed for three weeks. He had been treated with blisters, iodine, and a variety of internal remedies. Electricity had been tried before his admission to the hospital, but this gave no relief. In the hospital he was subjected to the treatment with flowers of sulphur externally applied, and also had the nerve stretched, but with no relief. Antifebrin was then given in as large doses as the patient could bear. Fifty grains were given in four hours. The patient became somewhat cyanotic, and a half-ounce of whiskey was given with the last dose. The pain was nearly, but not entirely, relieved, and the next day the antifebrin was again given in the following doses: 10 A.M., twenty grans; 12 M., twenty grains, making 40 grains in two hours. It was not necessary to give whiskey. The following day the pain was completely relieved, and the patient walked about the ward without difficulty. In two days more the patient insisted on leaving the hospital. He promised to report if the pain should return, but though 2½ months had elapsed up to the time of Dr. Flint's report, nothing had been heard of the patient.

Choroido-Retinitis an Early Sign of Cerebral Syphilis.

At the meeting of the Berlin Medical Society, October 11, 1888, Dr. Ostwalt sought to show that choroido-retinitis is the first sign of cerebral syphilis, and that for this reason it deserves the most careful attention on the part of ophthalmologists. He referred to five observations in which specific treatment had produced complete recovery. The disease has, he says, nothing in common with syphilitic iritis. If by chance the two affections should co-exist in the same person, each preserves its independence. In the retina the disease involves the vascular layer and the terminal arteries. As the arteries of the retina are the terminal arteries of the internal carotid, it can be understood how they may become diseased simultaneously under the influence of syphilis; and also the relation that exists between the syphilitic choroido-retinitis and syphilis of the arteries of the brain is explained.—*Bulletin Médical*, October 21, 1888.

NEWS.

—According to the decision of Internal Revenue Commissioner Miller, artificially colored butter is liable to the same tax as oleomargarine—two cents a pound.

—The total number of professors, lecturers and instructors at the University of Pennsylvania, as given in the catalogue, is 169, an increase of 17 over last year; while the total number of students is 1222, as against over 1187 in the preceding term. The annual catalogue of Harvard University shows 1899 students; last year, there were 1612.

—The Editor of the *Journal of Cutaneous and Genito-Urinary Diseases* announces that beginning with the January number the magazine will be published by D. Appleton & Co. No essential change will be made in the style or appearance of the *Journal.* All arrears should be sent to Wm. Wood & Co., and all renewals and subscriptions for the new volume to D. Appleton & Co.

—The *New Orleans Med. and Surgical Journal,* Dec., 1888, says that Dr. J. P. McGee, who was charged last September with an attempt to forge a diploma of the Memphis Hospital Medical College, was unanimously expelled from the Tri-State Medical Association at its meeting in Memphis, Nov. 14, 1888. The accused had engaged a stencil-cutter to make a seal in imitation of that of the College.

—The unexpected prevalence of typhoid fever in some quarters of New York, relates the *Tribune,* has been curiously illustrated in the cases of Drs. W. J. Martin and Frank B. Carpenter, both of whom are lying ill with this malady at the New York Hospital. Dr. Martin has been employed at the hospital for a year, and assumed charge of the institution on December 1, the day he was taken ill. Dr. Carpenter was brought there from his office near by.

—The students of the Medical Department of the University of the City of New York are in a state of mutiny against the Faculty because their instructor in anatomy, Dr. Weisse, who is a great favorite with them, has not been raised to the Chair of Anatomy, which has just become vacant. They declare that one-half of their number will leave the college unless justice be done to Dr. Weisse, who has been connected with the University for 25 years. The Faculty say that the vacant chair will be filled by competitive examination, at which Prof. Weisse may attend as an applicant if he desires.

HUMOR.

YOUNG HOUSEWIFE (to husband who says he knows how to cook)—"How long do you broil a chicken, Edwin?" Edwin—"Oh—er—how long is the chicken?"—*Life.*

WHAT THEY THINK OF EACH OTHER.—"What is the difference between the allopaths and the homœopaths?" asked Mrs. Ceemso of her husband. "Oh," he replied, "the allopaths think the homœopaths are not ortho-docs."—*Life.*

A STOUT ELDERLY LADY was hanging by a strap and casting black looks at an inoffensive but ungallant dude, who sat sucking the head of his cane; a sudden lurch of the car flung the lady upon him with great force. "Say, dash it, don't you know," exclaimed the youth, "you've crushed my foot to a jelly?" "It's not the first time I've made calf's-foot jelly," retorted the woman, severely, as he vanished and she prepared to sit down.—*Shoe and Leather Reporter.*

PROFESSOR OF MATERIA MEDICA (lecturing on tannin)—"And, by the bye, gentlemen, tannic acid is the antidote to the poison of mushroom; can any of you explain its action?" Texas student—"T-t-think I can, professor!" "Well, sir, explain to the class the chemical reactions that occur, and how tannin acts as antidote to the poison of the poisonous mushroom." "It f-f-forms the t-t-tannate of m-mush, and leaves room in the s-s-stomach!"—*Daniel's Texas Med. Journal.*

"ENGLISH AS SHE IS WROTE."—As an example of "English as she is wrote," the following specimen from *American Notes and Queries* is exceedingly amusing: The "Proliferous Top" is accompanied by this set of instructions: "Roll the string in the pulley and draw; put the mother top on the little ones which are scattered about purposely one after the other; it is sufficient for putting them in movement. count number brought. The top goes in every manner that is wished according to the chances of positions or the skill of persons. The proliferous top is not only an attractive toy but it is a healthy and agreeable pass time. Moreover it is the ingenious *worck* of a learned physician who has traveled in various countries, and has for a long time meditated on the causes and effects which have the most influence on human constitution with regards both to health and intelligence."

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Medical and surgical reporter
(Philadelphia)

GERSTS